

chain nodes :

14 15 16 17 19 20 22 24

ring nodes :

1 2 3 4 5 6 7 8 9 10 11 12 13 25 26 27 28

chain bonds :

2-24 3-22 4-19 7-14 8-15 9-20 15-16 15-17

ring bonds :

1-2 1-6 1-11 2-3 3-4 4-5 5-6 5-7 6-10 7-8 8-9 9-10 10-13 11-12 12-13  
12-28 13-25 25-26 26-27 27-28

exact/norm bonds :

1-11 2-24 3-22 4-19 5-7 6-10 7-8 7-14 8-9 9-10 10-13 11-12 15-16 15-17

exact bonds :

8-15 9-20

normalized bonds :

1-2 1-6 2-3 3-4 4-5 5-6 12-13 12-28 13-25 25-26 26-27 27-28

G4:H,X,N,Hy

G5:H,X,NH,N

G6:O,S,X,Hy,N

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom  
11:Atom 12:Atom 13:Atom 14:CLASS 15:CLASS 16:CLASS 17:CLASS 19:CLASS  
20:CLASS 22:CLASS 24:CLASS 25:Atom 26:Atom 27:Atom 28:Atom

L1 STRUCTURE UPLOADED

=> d 11

<02/09/2006>

Habte

L1 HAS NO ANSWERS  
L1 STR

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

Structure attributes must be viewed using STN Express query preparation.

=> s l1

SAMPLE SEARCH INITIATED 16:01:19 FILE 'REGISTRY'  
SAMPLE SCREEN SEARCH COMPLETED - 47 TO ITERATE

100.0% PROCESSED 47 ITERATIONS 19 ANSWERS  
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*  
BATCH \*\*COMPLETE\*\*  
PROJECTED ITERATIONS: 529 TO 1351  
PROJECTED ANSWERS: 119 TO 641

L2 19 SEA SSS SAM L1

=> s l1 sss full

FULL SEARCH INITIATED 16:01:27 FILE 'REGISTRY'  
FULL SCREEN SEARCH COMPLETED - 872 TO ITERATE

100.0% PROCESSED 872 ITERATIONS 346 ANSWERS  
SEARCH TIME: 00.00.01

L3 346 SEA SSS FUL L1

=> file caplus

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	166.94	167.15

FILE 'CAPLUS' ENTERED AT 16:01:37 ON 09 FEB 2006  
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FILE COVERS 1907 - 9 Feb 2006 VOL 144 ISS 7  
FILE LAST UPDATED: 8 Feb 2006 (20060208/ED)

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=> s l3

L4            36 L3

=> d ibib abs hitstr tot

L4 ANSWER 1 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 2005:349002 CAPLUS  
 DOCUMENT NUMBER: 142:373851  
 TITLE: Preparation of substituted quinobenzoxazine analogs as antitumor agents  
 INVENTOR(S): Whitten, Jeffrey P.; Schwaabe, Michael; Siddiqui-Jain, Adam; Moran, Terence  
 PATENT ASSIGNEE(S): USA  
 SOURCE: U.S. Pat. Appl. Publ., 453 pp., Cont.-in-part of U.S. Ser. No. 821,243.  
 CODEN: USXXCO  
 Patent  
 DOCUMENT TYPE: English  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 2  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2005085468	A1	20050421	US 2004-903975	20040730
PRIORITY APPLN. INFO.:			US 2003-461271P	P 20030407
			US 2003-463171P	P 20030415
			US 2003-519535P	P 20031112
			US 2003-532727P	P 20031223
			US 2004-821243	A2 20040407

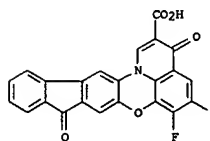
OTHER SOURCE(S): MARPAT 142:373851  
 GI

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

AB The present invention relates to quinobenzoxazine analogs I [V = H, halo, NR1R2; A = H, F, N(R1)2; Z = O, S, NR1, CH2; U = OR2, NR1R2; X = OR2, NR1R2, halo, azido, SR2; R1 and R2 in NR1R2 may form a double bond or ring; R1 = H, alkyl; R2 = H, alkyl or alkenyl optionally containing one or more non-adjacent heteroatoms selected from N, O, and S, and optionally substituted with a carbocyclic or heterocyclic ring; or R2 = (un)substituted heterocyclyl, (hetero)aryl; V = (un)substituted 1,2-benzo, pyrido, naphthaleno, etc.; and pharmaceutically acceptable salts, esters and prodrugs thereof] which are useful for ameliorating a cell disorder such as cancer. Forty-six synthetic examples showed the synthesis of intermediates. E.g., a 4-step synthesis of the fluoroacid II, starting from potassium Et malonate and 2,3,4,5-tetrafluorobenzoyl chloride, was given. Such prepared fluoroacids were reacted with amines to provide compds. I which were then tested in MTS assay and for inhibition of c-myc mRNA. E.g., the compound III showed 50% inhibition of c-myc mRNA levels at 4  $\mu$ M. The compds. I were tested for antitumor activity in mice (biol. data given for representative compds. I). The compds. I were also claimed as useful for ameliorating a microbial infection.

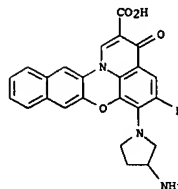
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 RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)  
 (preparation of substituted quinobenzoxazine analogs as antitumor agents)  
 RN 783357-59-1 CAPLUS

L4 ANSWER 1 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)  
 CN 3H,9H-Indeno[1,2-b]pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid, 5,6-difluoro-3,9-dioxo- (9CI) (CA INDEX NAME)



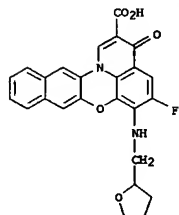
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 783357-84-6P 783357-85-7P 783357-86-8P  
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 783357-90-4P 783357-91-5P 783357-92-6P  
 783357-93-7P 783357-94-8P 783357-95-9P  
 783357-96-0P 783357-97-1P 783357-98-2P  
 783357-99-3P 783358-00-9P 783358-01-0P  
 783358-02-1P 783358-04-3P 783358-05-4P  
 783358-06-5P 783361-20-6P 783363-38-2P  
 RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (preparation of substituted quinobenzoxazine analogs as antitumor agents)

RN 216501-37-0 CAPLUS  
 CN 3H-Benzo[b]pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid, 6-(3-amino-1-pyrrolidinyl)-5-fluoro-3-oxo- (9CI) (CA INDEX NAME)

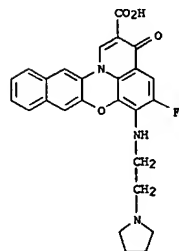


RN 783357-82-4 CAPLUS  
 CN 3H-Benzo[b]pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid, 5-fluoro-3-oxo-6-[[[tetrahydro-2-furanyl]methyl]amino]- (9CI) (CA INDEX NAME)

L4 ANSWER 1 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

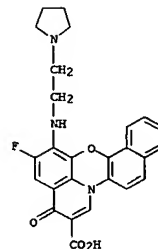


RN 783357-83-5 CAPLUS  
 CN 3H-Benzo[b]pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid, 5-fluoro-3-oxo-6-[[[2-(1-pyrrolidinyl)ethyl]amino]- (9CI) (CA INDEX NAME)

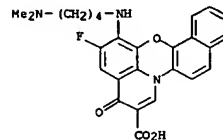


RN 783357-84-6 CAPLUS  
 CN 3H-Benzo[c]pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid, 5-fluoro-3-oxo-6-[[[2-(1-pyrrolidinyl)ethyl]amino]- (9CI) (CA INDEX NAME)

L4 ANSWER 1 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



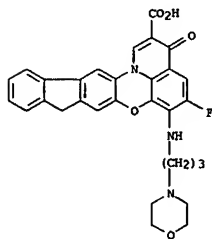
RN 783357-85-7 CAPLUS  
 CN 3H-Benzo[c]pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid, 6-[[[4-(dimethylamino)butyl]amino]-5-fluoro-3-oxo- (9CI) (CA INDEX NAME)



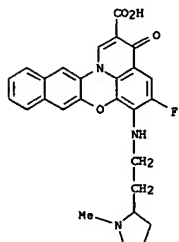
RN 783357-86-8 CAPLUS  
 CN 3H,9H-Indeno[1,2-b]pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid, 5-fluoro-6-[[[3-(4-morpholinyl)propyl]amino]-3-oxo- (9CI) (CA INDEX NAME)



L4 ANSWER 1 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



RN 783357-87-9 CAPLUS  
 CN 3H-Benzo[b]pyrido[3,2,1-k]phenoxazine-2-carboxylic acid,  
 5-fluoro-3-oxo-6-[[2-(1-methyl-2-pyrrolidiny)ethyl]amino]- (9CI) (CA  
 INDEX NAME)

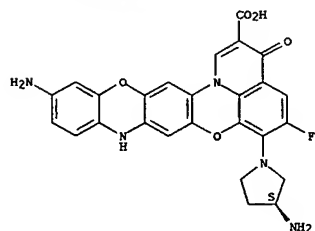


RN 783357-88-0 CAPLUS  
 CN 3H-Benzo[b]pyrido[3,2,1-k]phenoxazine-2-carboxylic acid,  
 6-[[4-(dimethylamino)butyl]amino]-5-fluoro-3-oxo- (9CI) (CA INDEX NAME)

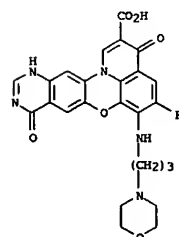
L4 ANSWER 1 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

RN 783357-91-5 CAPLUS  
 CN 3H,9H-Pyrido[1,2,3-jk]triphenodioxazine-2-carboxylic acid,  
 12-amino-6-[(3S)-3-amino-1-pyrrolidinyl]-5-fluoro-3-oxo- (9CI) (CA INDEX  
 NAME)

Absolute stereochemistry.

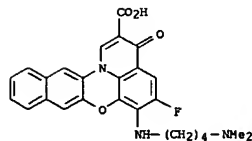


RN 783357-92-6 CAPLUS  
 CN 3H-Pyrido[3,2,1-kl]pyrimido[4,5-b]phenoxazine-2-carboxylic acid,  
 5-fluoro-9,10-dihydro-6-[[3-(4-morpholinyl)propyl]amino]-3,9-dioxo- (9CI)  
 (CA INDEX NAME)

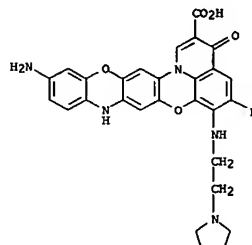


RN 783357-93-7 CAPLUS  
 CN 3H-Benzo[b]pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid,  
 4-amino-5,6-difluoro-3-oxo- (9CI) (CA INDEX NAME)

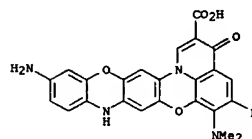
L4 ANSWER 1 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



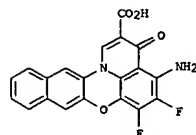
RN 783357-89-1 CAPLUS  
 CN 3H,9H-Pyrido[1,2,3-jk]triphenodioxazine-2-carboxylic acid,  
 12-amino-5-fluoro-3-oxo-6-[[2-(1-pyrrolidiny)ethyl]amino]- (9CI) (CA  
 INDEX NAME)



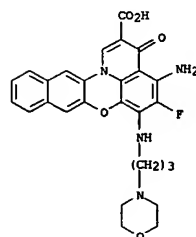
RN 783357-90-4 CAPLUS  
 CN 3H,9H-Pyrido[1,2,3-jk]triphenodioxazine-2-carboxylic acid,  
 12-amino-6-(dimethylamino)-5-fluoro-3-oxo- (9CI) (CA INDEX NAME)



L4 ANSWER 1 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

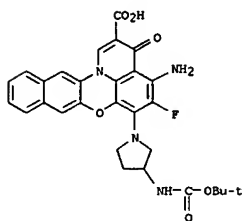


RN 783357-94-8 CAPLUS  
 CN 3H-Benzo[b]pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid,  
 4-amino-5-fluoro-6-[[3-(4-morpholinyl)propyl]amino]-3-oxo- (9CI) (CA  
 INDEX NAME)

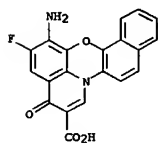


RN 783357-95-9 CAPLUS  
 CN 3H-Benzo[b]pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid,  
 4-amino-6-[[3-[[[1,1-dimethylethoxy]carbonyl]amino]-1-pyrrolidinyl]-5-  
 fluoro-3-oxo- (9CI) (CA INDEX NAME)

L4 ANSWER 1 OF 36 CAPLUS COPYRIGHT 2006 ACS ON STN (Continued)

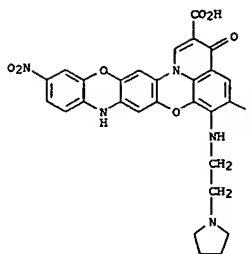


RN 783357-96-0 CAPLUS  
 CN 3H-Benzo[c]pyrido[3,2,1-k]phenoxazine-2-carboxylic acid,  
 6-amino-5-fluoro-3-oxo- (9CI) (CA INDEX NAME)

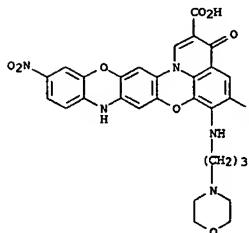


RN 783357-97-1 CAPLUS  
 CN 3H,9H-Pyrido[1,2,3-jk]triphenodioxazine-2-carboxylic acid,  
 5-fluoro-12-nitro-3-oxo-6-[[2-(1-pyrrolidinyl)ethyl]amino]- (9CI) (CA  
 INDEX NAME)

L4 ANSWER 1 OF 36 CAPLUS COPYRIGHT 2006 ACS ON STN (Continued)

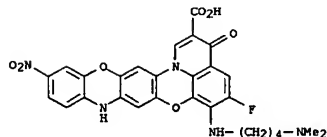


RN 783357-98-2 CAPLUS  
 CN 3H,9H-Pyrido[1,2,3-jk]triphenodioxazine-2-carboxylic acid,  
 5-fluoro-6-[[3-(4-morpholinyl)propyl]amino]-12-nitro-3-oxo- (9CI) (CA  
 INDEX NAME)

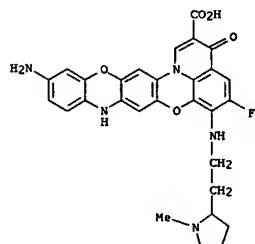


RN 783357-99-3 CAPLUS  
 CN 3H,9H-Pyrido[1,2,3-jk]triphenodioxazine-2-carboxylic acid,  
 6-[[4-(dimethylamino)butyl]amino]-5-fluoro-12-nitro-3-oxo- (9CI) (CA  
 INDEX NAME)

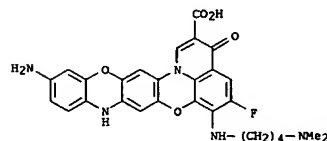
L4 ANSWER 1 OF 36 CAPLUS COPYRIGHT 2006 ACS ON STN (Continued)



RN 783358-00-9 CAPLUS  
 CN 3H,9H-Pyrido[1,2,3-jk]triphenodioxazine-2-carboxylic acid,  
 12-amino-5-fluoro-6-[[2-(1-methyl-2-pyrrolidinyl)ethyl]amino]-3-oxo- (9CI)  
 (CA INDEX NAME)



RN 783358-01-0 CAPLUS  
 CN 3H,9H-Pyrido[1,2,3-jk]triphenodioxazine-2-carboxylic acid,  
 12-amino-5-fluoro-6-[[4-(dimethylamino)butyl]amino]-3-oxo- (9CI) (CA  
 INDEX NAME)

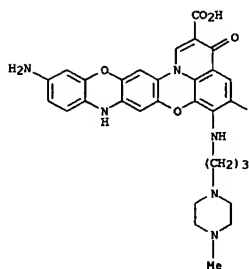


RN 783358-02-1 CAPLUS  
 CN 3H,9H-Pyrido[1,2,3-jk]triphenodioxazine-2-carboxylic acid,  
 12-amino-5-fluoro-6-[[3-(4-methyl-1-piperazinyl)propyl]amino]-3-oxo- (9CI)

&lt;02/09/2006&gt;

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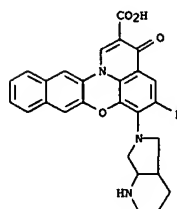
L4 ANSWER 1 OF 36 CAPLUS COPYRIGHT 2006 ACS ON STN (Continued)



RN 783358-04-3 CAPLUS  
 CN 3H-Benzo[b]pyrido[3,2,1-k]phenoxazine-2-carboxylic acid,  
 5-fluoro-6-(octahydro-6H-pyrrolo[3,4-b]pyridin-6-yl)-3-oxo-,  
 mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 783358-03-2  
 CMF C27 H22 F N3 O4



CM 2

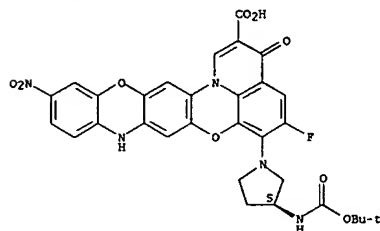
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L4 ANSWER 1 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

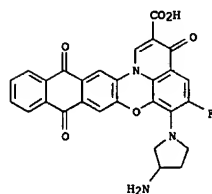


RN 783358-05-4 CAPLUS  
 CN 3H,9H-Pyrido[1,2,3-jk]triphenodioxazine-2-carboxylic acid,  
 6-[(3S)-3-[[[(1,1-dimethylethoxy)carbonyl]amino]-1-pyrrolidinyl]-5-fluoro-  
 12-nitro-3-oxo- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



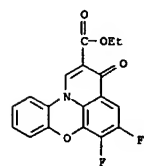
RN 783358-06-5 CAPLUS  
 CN 3H-Naphtho[2,3-b]pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid,  
 6-(3-amino-1-pyrrolidinyl)-5-fluoro-9,14-dihydro-3,9,14-trioxo- (9CI) (CA  
 INDEX NAME)



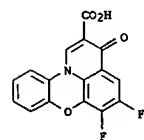
RN 783361-20-6 CAPLUS

L4 ANSWER 1 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

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 783366-10-9P 783366-11-0P 783366-12-1P  
 783366-13-2P 783366-14-3P 783366-17-4P  
 783366-19-8P 783366-21-2P 783366-27-8P  
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 783366-41-6P  
 RI: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
 (Reactant or reagent)  
 (prepn. of substituted quinobenzoxazine analogs as antitumor agents)  
 RN 100828-10-2 CAPLUS  
 CN 3H-Pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid, 5,6-difluoro-3-oxo-,  
 ethyl ester (9CI) (CA INDEX NAME)

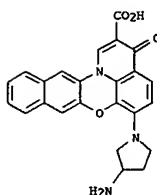


RN 100828-11-3 CAPLUS  
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 (9CI) (CA INDEX NAME)

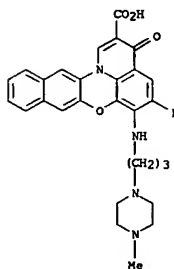


RN 110943-91-4 CAPLUS  
 CN 3H-Pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid, 5,6-difluoro-10-nitro-3-  
 oxo-, ethyl ester (9CI) (CA INDEX NAME)

L4 ANSWER 1 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)  
 CN 3H-Benzo[b]pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid,  
 6-(3-amino-1-pyrrolidinyl)-3-oxo- (9CI) (CA INDEX NAME)

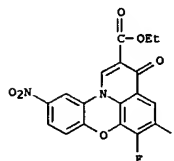


RN 783363-38-2 CAPLUS  
 CN 3H-Benzo[b]pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid,  
 5-fluoro-6-[[3-(4-methyl-1-piperazinyl)propyl]amino]-3-oxo- (9CI) (CA  
 INDEX NAME)

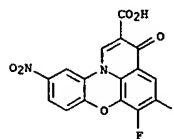


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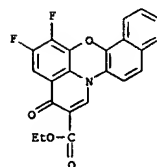
L4 ANSWER 1 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



RN 110944-02-0 CAPLUS  
 CN 3H-Pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid, 5,6-difluoro-10-nitro-3-  
 oxo- (9CI) (CA INDEX NAME)

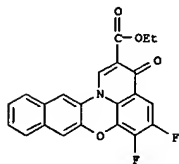


RN 216501-18-7 CAPLUS  
 CN 3H-Benzo[c]pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid,  
 5,6-difluoro-3-oxo-, ethyl ester (9CI) (CA INDEX NAME)

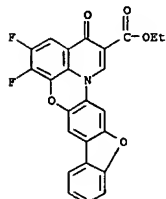


RN 216501-20-1 CAPLUS  
 CN 3H-Benzo[b]pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid,  
 5,6-difluoro-3-oxo-, ethyl ester (9CI) (CA INDEX NAME)

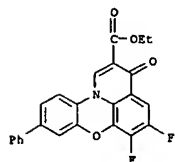
L4 ANSWER 1 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



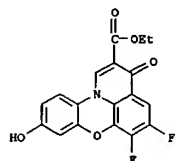
RN 237425-19-3 CAPLUS  
 CN 3H-Benzofuro[2,3-b]pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid, 5,6-difluoro-3-oxo-, ethyl ester (9CI) (CA INDEX NAME)



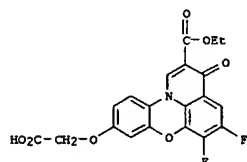
RN 783365-82-2 CAPLUS  
 CN 3H-Pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid, 5,6-difluoro-3-oxo-9-phenyl-, ethyl ester (9CI) (CA INDEX NAME)



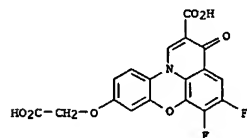
L4 ANSWER 1 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)  
 CN 3H-Pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid, 5,6-difluoro-9-hydroxy-3-oxo-, ethyl ester (9CI) (CA INDEX NAME)



RN 783365-93-5 CAPLUS  
 CN 3H-Pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid, 9-(carboxymethoxy)-5,6-difluoro-3-oxo-, 2-ethyl ester (9CI) (CA INDEX NAME)



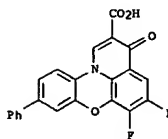
RN 783365-94-6 CAPLUS  
 CN 3H-Pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid, 9-(carboxymethoxy)-5,6-difluoro-3-oxo-, 2-ethyl ester (9CI) (CA INDEX NAME)



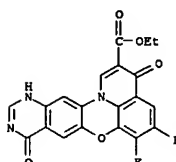
RN 783365-95-7 CAPLUS  
 CN 3H-Benzo[b]pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid, 4,5,6-trifluoro-3-oxo-, ethyl ester (9CI) (CA INDEX NAME)

L4 ANSWER 1 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

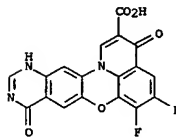
RN 783365-83-3 CAPLUS  
 CN 3H-Pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid, 5,6-difluoro-3-oxo-9-phenyl- (9CI) (CA INDEX NAME)



RN 783365-90-2 CAPLUS  
 CN 3H-Pyrido[3,2,1-kl]pyrimido[4,5-b]phenoxazine-2-carboxylic acid, 5,6-difluoro-9,10-dihydro-3,9-dioxo-, ethyl ester (9CI) (CA INDEX NAME)

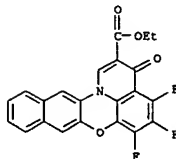


RN 783365-91-3 CAPLUS  
 CN 3H-Pyrido[3,2,1-kl]pyrimido[4,5-b]phenoxazine-2-carboxylic acid, 5,6-difluoro-9,10-dihydro-3,9-dioxo- (9CI) (CA INDEX NAME)

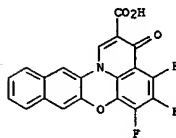


RN 783365-92-4 CAPLUS

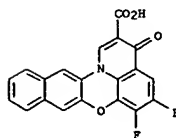
L4 ANSWER 1 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



RN 783365-96-8 CAPLUS  
 CN 3H-Benzo[b]pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid, 4,5,6-trifluoro-3-oxo- (9CI) (CA INDEX NAME)

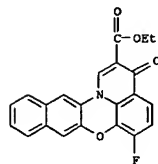


RN 783365-97-9 CAPLUS  
 CN 3H-Benzo[b]pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid, 5,6-difluoro-3-oxo- (9CI) (CA INDEX NAME)

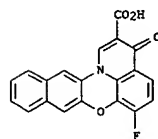


RN 783365-98-0 CAPLUS  
 CN 3H-Benzo[b]pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid, 6-fluoro-3-oxo-, ethyl ester (9CI) (CA INDEX NAME)

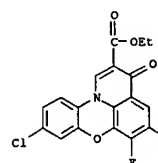
L4 ANSWER 1 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



RN 783365-99-1 CAPLUS  
CN 3H-Benzo[b]pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid, 6-fluoro-3-oxo- (9CI) (CA INDEX NAME)

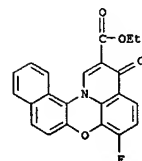


RN 783366-00-7 CAPLUS  
CN 3H-Pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid, 9-chloro-5,6-difluoro-3-oxo-, ethyl ester (9CI) (CA INDEX NAME)

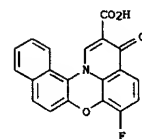


RN 783366-02-9 CAPLUS  
CN 3H-Pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid, 9-chloro-5,6-difluoro-3-oxo- (9CI) (CA INDEX NAME)

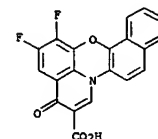
L4 ANSWER 1 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



RN 783366-07-4 CAPLUS  
CN 3H-Benzo[a]pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid, 6-fluoro-3-oxo- (9CI) (CA INDEX NAME)

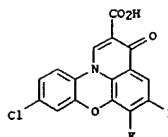


RN 783366-08-5 CAPLUS  
CN 3H-Benzo[c]pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid, 5,6-difluoro-3-oxo- (9CI) (CA INDEX NAME)

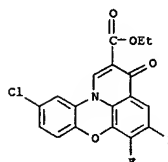


RN 783366-09-6 CAPLUS  
CN 3H-Benzofuro[2,3-b]pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid, 5,6-difluoro-3-oxo- (9CI) (CA INDEX NAME)

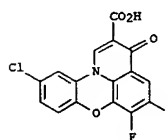
L4 ANSWER 1 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



RN 783366-03-0 CAPLUS  
CN 3H-Pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid, 10-chloro-5,6-difluoro-3-oxo-, ethyl ester (9CI) (CA INDEX NAME)

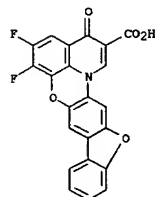


RN 783366-05-2 CAPLUS  
CN 3H-Pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid, 10-chloro-5,6-difluoro-3-oxo- (9CI) (CA INDEX NAME)

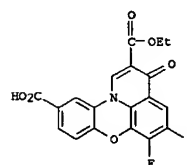


RN 783366-06-3 CAPLUS  
CN 3H-Benzo[a]pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid, 6-fluoro-3-oxo-, ethyl ester (9CI) (CA INDEX NAME)

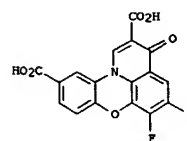
L4 ANSWER 1 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



RN 783366-10-9 CAPLUS  
CN 3H-Pyrido[3,2,1-kl]phenoxazine-2,10-dicarboxylic acid, 5,6-difluoro-3-oxo-, 2-ethyl ester (9CI) (CA INDEX NAME)

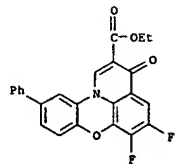


RN 783366-11-0 CAPLUS  
CN 3H-Pyrido[3,2,1-kl]phenoxazine-2,10-dicarboxylic acid, 5,6-difluoro-3-oxo- (9CI) (CA INDEX NAME)

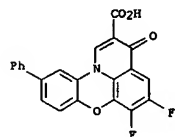


RN 783366-12-1 CAPLUS  
CN 3H-Pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid, 5,6-difluoro-3-oxo-10-phenyl-, ethyl ester (9CI) (CA INDEX NAME)

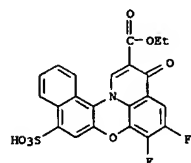
L4 ANSWER 1 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



RN 783366-13-2 CAPLUS  
CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 5,6-difluoro-3-oxo-10-phenyl- (9CI) (CA INDEX NAME)

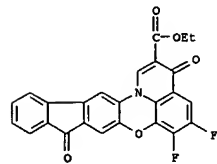


RN 783366-14-3 CAPLUS  
CN 3H-Benzo[a]pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 5,6-difluoro-3-oxo-9-sulfo-, 2-ethyl ester (9CI) (CA INDEX NAME)

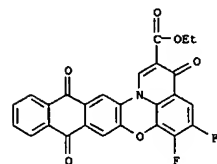


RN 783366-17-6 CAPLUS  
CN 3H-Benzo[a]pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 5,6-difluoro-3-oxo-9-sulfo- (9CI) (CA INDEX NAME)

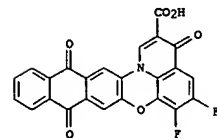
L4 ANSWER 1 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



RN 783366-30-3 CAPLUS  
CN 3H-Naphtho[2,3-b]pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 5,6-difluoro-9,14-dihydro-3,9,14-trioxo-, ethyl ester (9CI) (CA INDEX NAME)

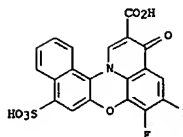


RN 783366-31-4 CAPLUS  
CN 3H-Naphtho[2,3-b]pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 5,6-difluoro-9,14-dihydro-3,9,14-trioxo- (9CI) (CA INDEX NAME)

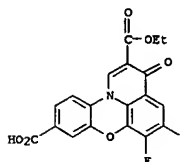


RN 783366-37-0 CAPLUS  
CN 3H-Oxazolo[5,4-b]pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 5,6-difluoro-3-oxo-, ethyl ester (9CI) (CA INDEX NAME)

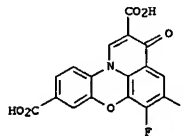
L4 ANSWER 1 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



RN 783366-19-8 CAPLUS  
CN 3H-Pyrido[3,2,1-k]phenoxazine-2,9-dicarboxylic acid, 5,6-difluoro-3-oxo-, 2-ethyl ester (9CI) (CA INDEX NAME)

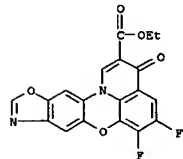


RN 783366-21-2 CAPLUS  
CN 3H-Pyrido[3,2,1-k]phenoxazine-2,9-dicarboxylic acid, 5,6-difluoro-3-oxo- (9CI) (CA INDEX NAME)

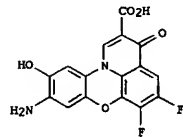


RN 783366-27-8 CAPLUS  
CN 3H,9H-Indeno[1,2-b]pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 5,6-difluoro-3,9-dioxo-, ethyl ester (9CI) (CA INDEX NAME)

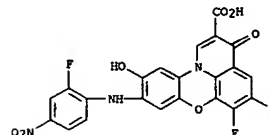
L4 ANSWER 1 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



RN 783366-38-1 CAPLUS  
CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 9-amino-5,6-difluoro-10-hydroxy-3-oxo- (9CI) (CA INDEX NAME)

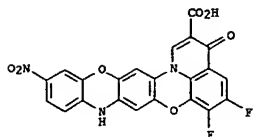


RN 783366-39-2 CAPLUS  
CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 5,6-difluoro-9-[(2-fluoro-4-nitrophenyl)amino]-10-hydroxy-3-oxo- (9CI) (CA INDEX NAME)

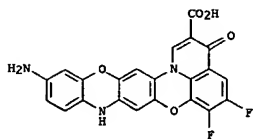


RN 783366-40-5 CAPLUS  
CN 3H,9H-Pyrido[1,2,3-jk]triphenodioxazine-2-carboxylic acid, 5,6-difluoro-12-nitro-3-oxo- (9CI) (CA INDEX NAME)

L4 ANSWER 1 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

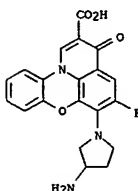


RN 783366-41-6 CAPLUS  
CN 3H-Pyrido[1,2,3-jk]triphendioxazine-2-carboxylic acid,  
12-amino-5,6-difluoro-3-oxo- (9CI) (CA INDEX NAME)



L4 ANSWER 2 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2004:982152 CAPLUS  
DOCUMENT NUMBER: 142:148073  
TITLE: Design and biological evaluation of novel antitumor agents with mechanisms of action against topoisomerase ii and/or g-quadruplexes  
AUTHOR(S): Kim, Mu-Yong  
CORPORATE SOURCE: Univ. of Texas, Austin, TX, USA  
SOURCE: (2002) 174 pp. Avail.: UMI, Order No. DA3110634  
From: Diss. Abstr. Int., B 2004, 64(11), 5537  
DOCUMENT TYPE: Dissertation  
LANGUAGE: English  
AB Unavailable  
IT 111783-54-1, A-62176  
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(design and biol. evaluation of novel antitumor agents with mechanisms of action against topoisomerase ii and/or g-quadruplexes)  
RN 111783-54-1 CAPLUS  
CN 3H-Pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid, 6-(3-amino-1-pyrrolidinyl)-5-fluoro-3-oxo-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

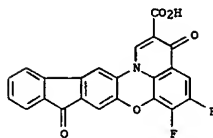
L4 ANSWER 3 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2004:902098 CAPLUS  
DOCUMENT NUMBER: 141:395565  
TITLE: Preparation of substituted quinobenzoxazine analogs as antitumor agents  
INVENTOR(S): Whitten, Jeffrey P.; Schwaebe, Michael; Siddiqui-Jain, Adam; Moran, Terrance  
PATENT ASSIGNEE(S): Cyclene Pharmaceuticals, Inc., USA  
SOURCE: PCT Int. Appl., 438 pp.  
CODEN: PIXX02  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 2  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004091504	A2	20041028	WO 2004-US11108	20040407
WO 2004091504	A3	20041028		
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RW: BW, GE, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2521810	AA	20041028	CA 2004-2521810	20040407
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NO 2005004669	A	20051114	NO 2005-4669	20051011
PRIORITY APPLN. INFO.:				
US 2003-461271P P 20030407				
US 2003-463171P P 20030415				
US 2003-519535P P 20031112				
US 2003-532727P P 20031223				
WO 2004-US11108 W 20040407				
OTHER SOURCE(S): MARPAT 141:395565				
G1				

L4 ANSWER 3 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

given. Such prepd. fluoroacids were reacted with amines to provide compds. I which were then tested in MTS assay and for inhibition of c-myc mRNA. E.g., the compd. III showed 50% inhibition of c-myc mRNA levels at 4  $\mu$ M. The compds. I were tested for antitumor activity in mice (biol. data given for representative compds. I). The compds. I were also claimed as useful for ameliorating a microbial infection.  
IT 783361-59-1P  
RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)  
(preparation of substituted quinobenzoxazine analogs as antitumor agents)  
RN 783361-59-1 CAPLUS  
CN 3H-Indeno[1,2-b]pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid, 5,6-difluoro-3,9-dioxo- (9CI) (CA INDEX NAME)



IT 216501-37-0P 783357-82-4P 783357-83-5P  
783357-84-6P 783357-85-7P 783357-86-8P  
783357-87-9P 783357-88-0P 783357-89-1P  
783357-90-4P 783357-91-5P 783357-92-6P  
783357-93-7P 783357-94-8P 783357-95-9P  
783357-96-0P 783357-97-1P 783357-98-2P  
783357-99-3P 783358-00-9P 783358-01-0P  
783358-02-1P 783358-04-3P 783358-05-4P  
783358-06-5P 783361-20-6P 783363-38-2P  
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(preparation of substituted quinobenzoxazine analogs as antitumor agents)  
RN 216501-37-0 CAPLUS  
CN 3H-Benzo[b]pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid, 6-(3-amino-1-pyrrolidinyl)-5-fluoro-3-oxo- (9CI) (CA INDEX NAME)

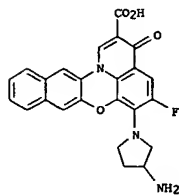
\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

AB The present invention relates to quinobenzoxazines analogs I [V = H, halo, NR1R2; A = H, F, NR1R2; Z = O, S, NR1, CH2; U = OR2, NR1R2; W = OR2, NR1R2, halo, azido, SR2; R1 and R2 in NR1R2 may form a double bond or ring; R1 = H, alkyl; R2 = H, alkyl or alkenyl optionally containing one or more non-adjacent heteroatoms selected from N, O, and S, and optionally substituted with a carbocyclic or heterocyclic ring; or R2 = (un)substituted heterocyclyl, (hetero)aryl; V = (un)substituted 1,2-benzo, pyrido, naphthaleno, etc.; and pharmaceutically acceptable salts, esters and prodrugs thereof] which are useful for ameliorating a cell disorder such as cancer. Forty-six synthetic examples showed the synthesis of intermediates. E.g., a 4-step synthesis of the fluoroacid II, starting from potassium Et malonate and 2,3,4,5-tetrafluorobenzoyl chloride, was

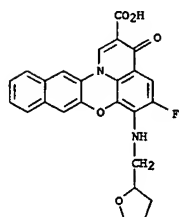
&lt;02/09/2006&gt;

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L4 ANSWER 3 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

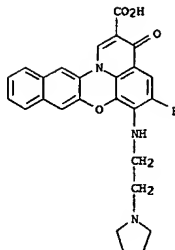


RN 783357-82-4 CAPLUS  
 CN 3H-Benzo[b]pyrido[3,2,1-k]phenoxazine-2-carboxylic acid,  
 5-fluoro-3-oxo-6-[[2-(1-methyl-2-pyrrolidinyl)ethyl]amino]- (9CI) (CA INDEX NAME)

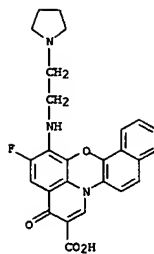


RN 783357-83-5 CAPLUS  
 CN 3H-Benzo[b]pyrido[3,2,1-k]phenoxazine-2-carboxylic acid,  
 5-fluoro-3-oxo-6-[[2-(1-pyrrolidinyl)ethyl]amino]- (9CI) (CA INDEX NAME)

L4 ANSWER 3 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

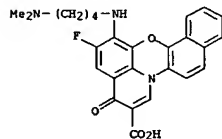


RN 783357-84-6 CAPLUS  
 CN 3H-Benzo[c]pyrido[3,2,1-k]phenoxazine-2-carboxylic acid,  
 5-fluoro-3-oxo-6-[[2-(1-pyrrolidinyl)ethyl]amino]- (9CI) (CA INDEX NAME)

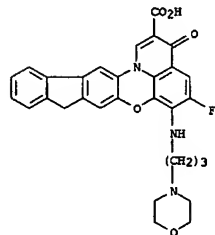


RN 783357-85-7 CAPLUS  
 CN 3H-Benzo[c]pyrido[3,2,1-k]phenoxazine-2-carboxylic acid,  
 6-[[4-(dimethylamino)butyl]amino]-5-fluoro-3-oxo- (9CI) (CA INDEX NAME)

L4 ANSWER 3 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

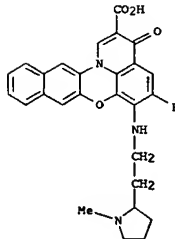


RN 783357-86-8 CAPLUS  
 CN 3H,9H-Indeno[1,2-b]pyrido[3,2,1-k]phenoxazine-2-carboxylic acid,  
 5-fluoro-6-[[3-(4-morpholinyl)propyl]amino]-3-oxo- (9CI) (CA INDEX NAME)

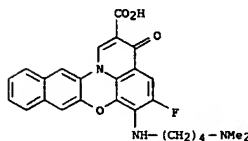


RN 783357-87-9 CAPLUS  
 CN 3H-Benzo[b]pyrido[3,2,1-k]phenoxazine-2-carboxylic acid,  
 5-fluoro-3-oxo-6-[[2-(1-methyl-2-pyrrolidinyl)ethyl]amino]- (9CI) (CA INDEX NAME)

L4 ANSWER 3 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



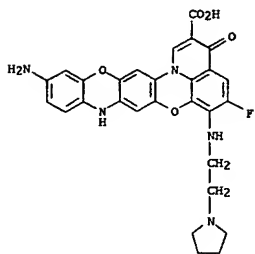
RN 783357-88-0 CAPLUS  
 CN 3H-Benzo[b]pyrido[3,2,1-k]phenoxazine-2-carboxylic acid,  
 6-[[4-(dimethylamino)butyl]amino]-5-fluoro-3-oxo- (9CI) (CA INDEX NAME)



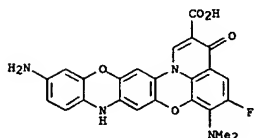
RN 783357-89-1 CAPLUS  
 CN 3H,9H-Pyrido[1,2,3-jk]triphenodioxazine-2-carboxylic acid,  
 12-amino-5-fluoro-3-oxo-6-[[2-(1-pyrrolidinyl)ethyl]amino]- (9CI) (CA INDEX NAME)



L4 ANSWER 3 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



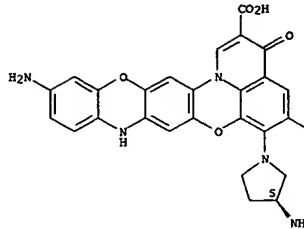
RN 783357-90-4 CAPLUS  
 CN 3H,9H-Pyrido[1,2,3-jk]triphenodioxazine-2-carboxylic acid,  
 12-amino-6-(dimethylamino)-5-fluoro-3-oxo- (9CI) (CA INDEX NAME)



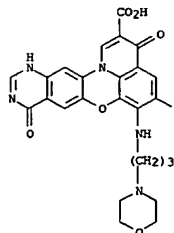
RN 783357-91-5 CAPLUS  
 CN 3H,9H-Pyrido[1,2,3-jk]triphenodioxazine-2-carboxylic acid,  
 12-amino-6-[(3S)-3-amino-1-pyrrolidinyl]-5-fluoro-3-oxo- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L4 ANSWER 3 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

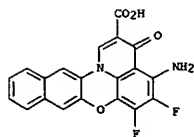


RN 783357-92-6 CAPLUS  
 CN 3H-Pyrido[3,2,1-kl]pyrimido[4,5-b]phenoxazine-2-carboxylic acid,  
 5-fluoro-9,10-dihydro-6-[[3-(4-morpholinyl)propyl]amino]-3,9-dioxo- (9CI)  
 (CA INDEX NAME)

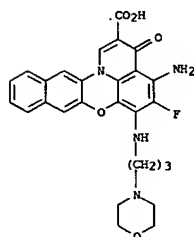


RN 783357-93-7 CAPLUS  
 CN 3H-Benzo[b]pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid,  
 4-amino-5,6-difluoro-3-oxo- (9CI) (CA INDEX NAME)

L4 ANSWER 3 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

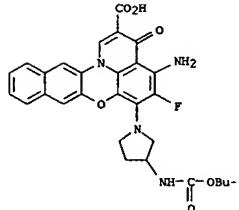


RN 783357-94-8 CAPLUS  
 CN 3H-Benzo[b]pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid,  
 4-amino-5-fluoro-6-[[3-(4-morpholinyl)propyl]amino]-3-oxo- (9CI) (CA INDEX NAME)

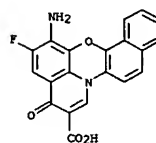


RN 783357-95-9 CAPLUS  
 CN 3H-Benzo[b]pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid,  
 4-amino-6-[3-[[[(1,1-dimethylethoxy)carbonyl]amino]-1-pyrrolidinyl]-5-fluoro-3-oxo- (9CI) (CA INDEX NAME)

L4 ANSWER 3 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

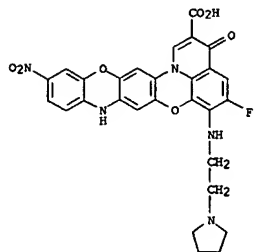


RN 783357-96-0 CAPLUS  
 CN 3H-Benzo[c]pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid,  
 6-amino-5-fluoro-3-oxo- (9CI) (CA INDEX NAME)

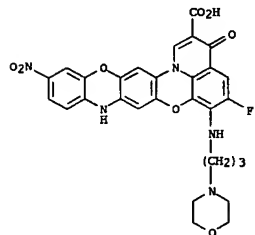


RN 783357-97-1 CAPLUS  
 CN 3H,9H-Pyrido[1,2,3-jk]triphenodioxazine-2-carboxylic acid,  
 5-fluoro-12-nitro-3-oxo-6-[[2-(1-pyrrolidinyl)ethyl]amino]- (9CI) (CA INDEX NAME)

L4 ANSWER 3 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



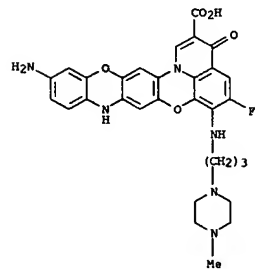
RN 783357-98-2 CAPLUS  
CN 3H,9H-Pyrido[1,2,3-jk]triphenodioxazine-2-carboxylic acid,  
5-fluoro-6-[[3-(4-morpholinyl)propyl]amino]-12-nitro-3-oxo- (9CI) (CA  
INDEX NAME)



RN 783357-99-3 CAPLUS  
CN 3H,9H-Pyrido[1,2,3-jk]triphenodioxazine-2-carboxylic acid,  
6-[[4-(dimethylamino)butyl]amino]-5-fluoro-12-nitro-3-oxo- (9CI) (CA  
INDEX NAME)

L4 ANSWER 3 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

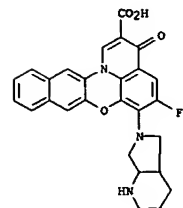
RN 783358-02-1 CAPLUS  
CN 3H,9H-Pyrido[1,2,3-jk]triphenodioxazine-2-carboxylic acid,  
12-amino-5-fluoro-6-[[3-(4-methyl-1-piperazinyl)propyl]amino]-3-oxo- (9CI)  
(CA INDEX NAME)



RN 783358-04-3 CAPLUS  
CN 3H-Benzo[b]pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid,  
5-fluoro-6-(octahydro-6H-pyrrolo[3,4-b]pyridin-6-yl)-3-oxo-,  
mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

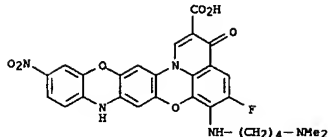
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CMF C27 H22 F N3 O4



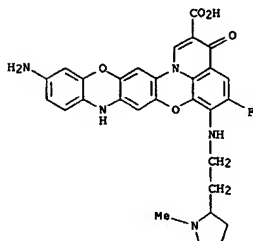
CM 2

&lt;02/09/2006&gt;

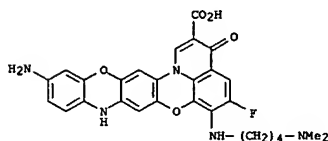
L4 ANSWER 3 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



RN 783358-00-9 CAPLUS  
CN 3H,9H-Pyrido[1,2,3-jk]triphenodioxazine-2-carboxylic acid,  
12-amino-5-fluoro-6-[[2-(1-methyl-2-pyrrolidinyl)ethyl]amino]-3-oxo- (9CI)  
(CA INDEX NAME)



RN 783358-01-0 CAPLUS  
CN 3H,9H-Pyrido[1,2,3-jk]triphenodioxazine-2-carboxylic acid,  
12-amino-6-[[4-(dimethylamino)butyl]amino]-5-fluoro-3-oxo- (9CI) (CA  
INDEX NAME)



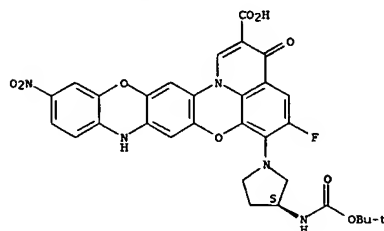
L4 ANSWER 3 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

CRN 76-05-1  
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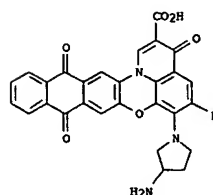


RN 783358-05-4 CAPLUS  
CN 3H,9H-Pyrido[1,2,3-jk]triphenodioxazine-2-carboxylic acid,  
6-[(3S)-3-[[1,1-dimethylethoxy]carbonyl]amino]-1-pyrrolidinyl]-5-fluoro-  
12-nitro-3-oxo- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



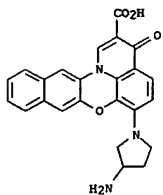
RN 783358-06-5 CAPLUS  
CN 3H-Naphtho[2,3-b]pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid,  
6-(3-amino-1-pyrrolidinyl)-5-fluoro-9,14-dihydro-3,9,14-trioxo- (9CI) (CA  
INDEX NAME)



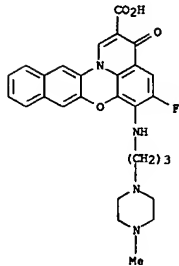
RN 783361-20-6 CAPLUS

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L4 ANSWER 3 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)  
 CN 3H-Benzo[b]pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid,  
 6-(3-amino-1-pyrrolidinyl)-3-oxo- (9CI) (CA INDEX NAME)

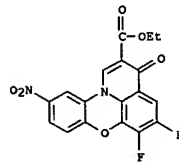


RN 783363-38-2 CAPLUS  
 CN 3H-Benzo[b]pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid,  
 5-fluoro-6-[[3-(4-methyl-1-piperazinyl)propyl]amino]-3-oxo- (9CI) (CA INDEX NAME)

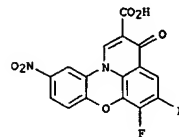


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 783365-93-5P 783365-94-6P 783365-95-7P  
 783365-96-8P 783365-97-9P 783365-98-0P  
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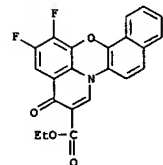
L4 ANSWER 3 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



RN 110944-02-0 CAPLUS  
 CN 3H-Pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid, 5,6-difluoro-10-nitro-3-oxo- (9CI) (CA INDEX NAME)



RN 216501-18-7 CAPLUS  
 CN 3H-Benzo[c]pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid,  
 5,6-difluoro-3-oxo-, ethyl ester (9CI) (CA INDEX NAME)



RN 216501-20-1 CAPLUS  
 CN 3H-Benzo[b]pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid,  
 5,6-difluoro-3-oxo-, ethyl ester (9CI) (CA INDEX NAME)

L4 ANSWER 3 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

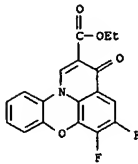
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RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. of substituted quinobenzoxazine analogs as antitumor agents)

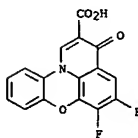
RN 100828-10-2 CAPLUS

CN 3H-Pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid, 5,6-difluoro-3-oxo-, ethyl ester (9CI) (CA INDEX NAME)



RN 100828-11-3 CAPLUS

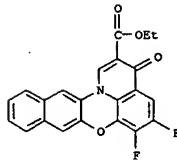
CN 3H-Pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid, 5,6-difluoro-3-oxo- (9CI) (CA INDEX NAME)



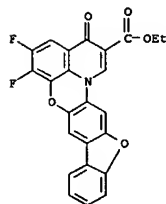
RN 110943-91-4 CAPLUS

CN 3H-Pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid, 5,6-difluoro-10-nitro-3-oxo-, ethyl ester (9CI) (CA INDEX NAME)

L4 ANSWER 3 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

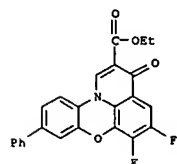


RN 237425-19-3 CAPLUS  
 CN 3H-Benzofuro[2,3-b]pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid,  
 5,6-difluoro-3-oxo-, ethyl ester (9CI) (CA INDEX NAME)



RN 783365-82-2 CAPLUS

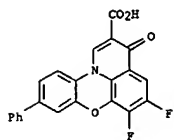
CN 3H-Pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid, 5,6-difluoro-3-oxo-9-phenyl-, ethyl ester (9CI) (CA INDEX NAME)



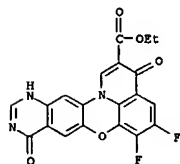
RN 783365-83-3 CAPLUS

CN 3H-Pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid, 5,6-difluoro-3-oxo-9-phenyl- (9CI) (CA INDEX NAME)

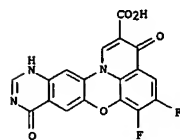
L4 ANSWER 3 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



RN 783365-90-2 CAPLUS  
CN 3H-Pyrido[3,2,1-k]pyrimido[4,5-b]phenoxazine-2-carboxylic acid, 5,6-difluoro-9,10-dihydro-3,9-dioxo-, ethyl ester (9CI) (CA INDEX NAME)

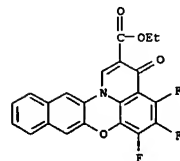


RN 783365-91-3 CAPLUS  
CN 3H-Pyrido[3,2,1-k]pyrimido[4,5-b]phenoxazine-2-carboxylic acid, 5,6-difluoro-9,10-dihydro-3,9-dioxo- (9CI) (CA INDEX NAME)

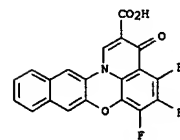


RN 783365-92-4 CAPLUS  
CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 5,6-difluoro-9-hydroxy-3-oxo-, ethyl ester (9CI) (CA INDEX NAME)

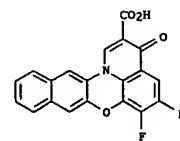
L4 ANSWER 3 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



RN 783365-96-8 CAPLUS  
CN 3H-Benzo[b]pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 4,5,6-trifluoro-3-oxo- (9CI) (CA INDEX NAME)

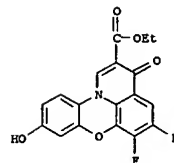


RN 783365-97-9 CAPLUS  
CN 3H-Benzo[b]pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 5,6-difluoro-3-oxo- (9CI) (CA INDEX NAME)

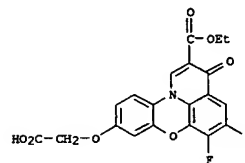


RN 783365-98-0 CAPLUS  
CN 3H-Benzo[b]pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-fluoro-3-oxo-, ethyl ester (9CI) (CA INDEX NAME)

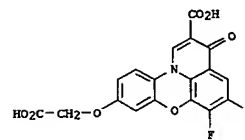
L4 ANSWER 3 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



RN 783365-93-5 CAPLUS  
CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 9-(carboxymethoxy)-5,6-difluoro-3-oxo-, 2-ethyl ester (9CI) (CA INDEX NAME)

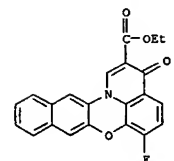


RN 783365-94-6 CAPLUS  
CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 9-(carboxymethoxy)-5,6-difluoro-3-oxo- (9CI) (CA INDEX NAME)

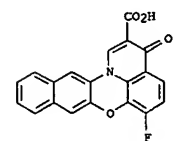


RN 783365-95-7 CAPLUS  
CN 3H-Benzo[b]pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 4,5,6-trifluoro-3-oxo-, ethyl ester (9CI) (CA INDEX NAME)

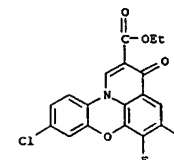
L4 ANSWER 3 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



RN 783365-99-1 CAPLUS  
CN 3H-Benzo[b]pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-fluoro-3-oxo- (9CI) (CA INDEX NAME)

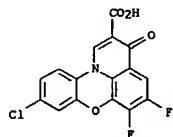


RN 783366-00-7 CAPLUS  
CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 9-chloro-5,6-difluoro-3-oxo-, ethyl ester (9CI) (CA INDEX NAME)

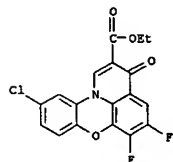


RN 783366-02-9 CAPLUS  
CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 9-chloro-5,6-difluoro-3-oxo- (9CI) (CA INDEX NAME)

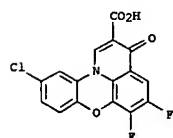
L4 ANSWER 3 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



RN 783366-03-0 CAPLUS  
CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 10-chloro-5,6-difluoro-3-oxo-, ethyl ester (9CI) (CA INDEX NAME)

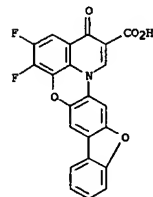


RN 783366-05-2 CAPLUS  
CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 10-chloro-5,6-difluoro-3-oxo- (9CI) (CA INDEX NAME)

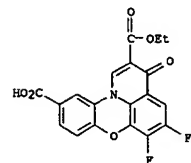


RN 783366-06-3 CAPLUS  
CN 3H-Benzo[a]pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-fluoro-3-oxo-, ethyl ester (9CI) (CA INDEX NAME)

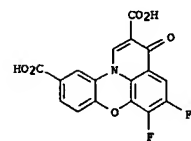
L4 ANSWER 3 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



RN 783366-10-9 CAPLUS  
CN 3H-Pyrido[3,2,1-k]phenoxazine-2,10-dicarboxylic acid, 5,6-difluoro-3-oxo-, 2-ethyl ester (9CI) (CA INDEX NAME)

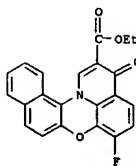


RN 783366-11-0 CAPLUS  
CN 3H-Pyrido[3,2,1-k]phenoxazine-2,10-dicarboxylic acid, 5,6-difluoro-3-oxo- (9CI) (CA INDEX NAME)

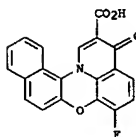


RN 783366-12-1 CAPLUS  
CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 5,6-difluoro-3-oxo-10-phenyl-, ethyl ester (9CI) (CA INDEX NAME)

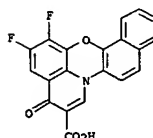
L4 ANSWER 3 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



RN 783366-07-4 CAPLUS  
CN 3H-Benzo[a]pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-fluoro-3-oxo- (9CI) (CA INDEX NAME)

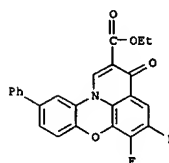


RN 783366-08-5 CAPLUS  
CN 3H-Benzo[c]pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 5,6-difluoro-3-oxo- (9CI) (CA INDEX NAME)

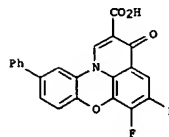


RN 783366-09-6 CAPLUS  
CN 3H-Benzofuro[2,3-b]pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 5,6-difluoro-3-oxo- (9CI) (CA INDEX NAME)

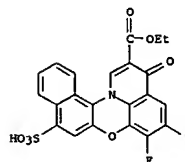
L4 ANSWER 3 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



RN 783366-13-2 CAPLUS  
CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 5,6-difluoro-3-oxo-10-phenyl- (9CI) (CA INDEX NAME)

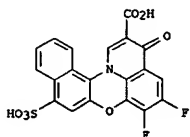


RN 783366-14-3 CAPLUS  
CN 3H-Benzo[a]pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 5,6-difluoro-3-oxo-9-sulfo-, 2-ethyl ester (9CI) (CA INDEX NAME)

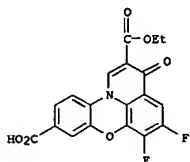


RN 783366-17-6 CAPLUS  
CN 3H-Benzo[a]pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 5,6-difluoro-3-oxo-9-sulfo- (9CI) (CA INDEX NAME)

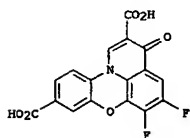
L4 ANSWER 3 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



RN 783366-19-8 CAPLUS  
CN 3H-Pyrido[3,2,1-kl]phenoxazine-2,9-dicarboxylic acid, 5,6-difluoro-3-oxo-, 2-ethyl ester (9CI) (CA INDEX NAME)

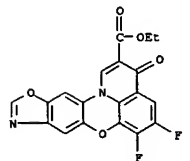


RN 783366-21-2 CAPLUS  
CN 3H-Pyrido[3,2,1-kl]phenoxazine-2,9-dicarboxylic acid, 5,6-difluoro-3-oxo- (9CI) (CA INDEX NAME)

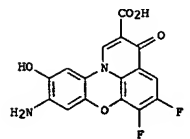


RN 783366-27-8 CAPLUS  
CN 3H-Indeno[1,2-b]pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid, 5,6-difluoro-3,9-dioxo-, ethyl ester (9CI) (CA INDEX NAME)

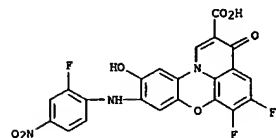
L4 ANSWER 3 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



RN 783366-38-1 CAPLUS  
CN 3H-Pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid, 9-amino-5,6-difluoro-10-hydroxy-3-oxo- (9CI) (CA INDEX NAME)

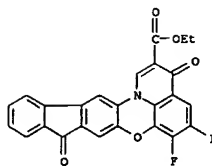


RN 783366-39-2 CAPLUS  
CN 3H-Pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid, 5,6-difluoro-9-[(2-fluoro-4-nitrophenyl)amino]-10-hydroxy-3-oxo- (9CI) (CA INDEX NAME)

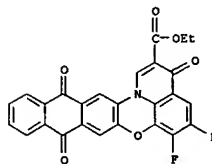


RN 783366-40-5 CAPLUS  
CN 3H-9H-Pyrido[1,2,3-jk]triphenodioxazine-2-carboxylic acid, 5,6-difluoro-12-nitro-3-oxo- (9CI) (CA INDEX NAME)

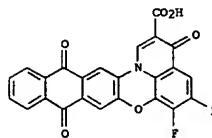
L4 ANSWER 3 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



RN 783366-30-3 CAPLUS  
CN 3H-Naphtho[2,3-b]pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid, 5,6-difluoro-9,14-dihydro-3,9,14-trioxo-, ethyl ester (9CI) (CA INDEX NAME)

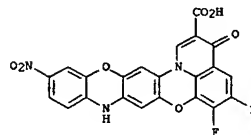


RN 783366-31-4 CAPLUS  
CN 3H-Naphtho[2,3-b]pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid, 5,6-difluoro-9,14-dihydro-3,9,14-trioxo- (9CI) (CA INDEX NAME)

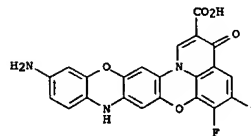


RN 783366-37-0 CAPLUS  
CN 3H-Oxazolo[5,4-b]pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid, 5,6-difluoro-3-oxo-, ethyl ester (9CI) (CA INDEX NAME)

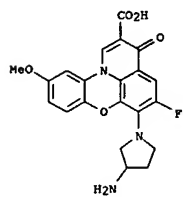
L4 ANSWER 3 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



RN 783366-41-6 CAPLUS  
CN 3H-9H-Pyrido[1,2,3-jk]triphenodioxazine-2-carboxylic acid, 12-amino-5,6-difluoro-3-oxo- (9CI) (CA INDEX NAME)

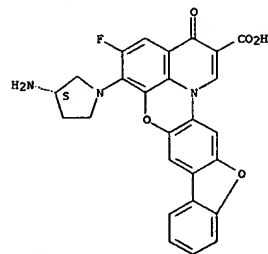


L4 ANSWER 4 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 2004:789773 CAPLUS  
 DOCUMENT NUMBER: 142:48473  
 TITLE: Inhibition of human immunodeficiency virus type I integrase by naphthamidines and 2-aminobenzimidazoles  
 Middleston, Tim; Lin, Hock B.; Montgomery, Debra; Rockway, Todd; Tang, Hua; Cheng, Xueheng; Lu, Liangjun; Mo, Hongmei; Kohlbrenner, William E.; Molla, Akhteruzzaman; Kati, Warren M.  
 CORPORATE SOURCE: Global Pharmaceutical Research and Development, Department R47D, Abbott Laboratories, Abbott Park, IL, 60064-6217, USA  
 SOURCE: Antiviral Research (2004), 64(1), 35-45  
 CODEN: ARSRRD; ISSN: 0166-3542  
 PUBLISHER: Elsevier B.V.  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 AB Retroviral integrases catalyze two of the steps of insertion of proviral DNA into the host genomic DNA. Inhibitors that target the second step, strand transfer into the host DNA, have been demonstrated to have antiviral activity in cell culture. The authors describe two classes of HIV-1 integrase inhibitors that block strand transfer, one based on a naphthamidine core and one on a benzimidazole core. While the naphthamidine compds. showed some propensity to interact with the DNA substrate, both classes were shown to bind directly to integrase. The naphthamidine compds. showed activity in cell culture, and a direct effect on integrase was indicated by an increase in 2-LTR products in the presence of a naphthamidine compound. These two classes of compds. represent potential starting points for the development of new classes of integrase inhibitors.  
 IT 808771-13-3, A 82232  
 RI: PAC (Pharmacological activity); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (inhibition of human immunodeficiency virus type I integrase by naphthamidines and 2-aminobenzimidazoles)  
 RN 808771-13-3 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-(3-amino-1-pyrrolidinyl)-5-fluoro-10-methoxy-3-oxo- (9CI) (CA INDEX NAME)



L4 ANSWER 5 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 2004:704788 CAPLUS  
 DOCUMENT NUMBER: 141:345220  
 TITLE: Structure of a Quinobenzoxazine-G-Quadruplex Complex by REDOR NMR  
 Mehta, Anil K.; Shayo, Yuda; Vankayalapati, Hariprasad; Hurley, Laurence H.; Schaefer, Jacob  
 CORPORATE SOURCE: Department of Chemistry, Washington University, St. Louis, MO, 63130, USA  
 SOURCE: Biochemistry (2004), 43(38), 11953-11958  
 CODEN: BICHAU; ISSN: 0006-2960  
 PUBLISHER: American Chemical Society  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 AB Rotational-echo double resonance solid-state 31P(19F) and 13C(19F) NMR spectra have been used to locate the binding of a fluoroquinobenzoxazine to a DNA G-quadruplex labeled by phosphorothiation and [methyl-13C]thymidine.  
 IT 776303-38-9  
 RI: BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)  
 (structure of a quinobenzoxazine-G-quadruplex complex by REDOR NMR)  
 RN 776303-38-9 CAPLUS  
 CN 3H-Benzofuro[2,3-b]pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[1(3S)-3-amino-1-pyrrolidinyl]-5-fluoro-3-oxo- (9CI) (CA INDEX NAME)

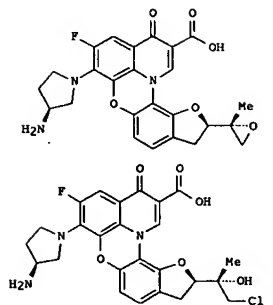
Absolute stereochemistry.



REFERENCE COUNT: 29 THERE ARE 29 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 4 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)  
 REFERENCE COUNT: 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 6 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 2003:750101 CAPLUS  
 DOCUMENT NUMBER: 139:214235  
 TITLE: Design, Synthesis, and Evaluation of Psorospermin/Quinobenzoxazine Hybrids as Structurally Novel Antitumor Agents  
 Kim, Mu-Yong; Na, Younghwa; Vankayalapati, Hariprasad; Gleason-Guzman, Mary; Hurley, Laurence H.  
 CORPORATE SOURCE: Coll. of Pharm., The Univ. of Arizona, Tucson, AZ, 85721, USA  
 SOURCE: Journal of Medicinal Chemistry (2003), 46(14), 2958-2972  
 CODEN: JMCHAR; ISSN: 0022-2623  
 PUBLISHER: American Chemical Society  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 139:214235  
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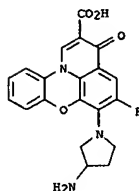
AB Topoisomerase II, an enzyme that catalyzes changes in the topol. of DNA, plays several key roles in DNA metabolism and chromosome structure, and it

is the primary cytotoxic target for a number of clin. important DNA intercalating agents such as doxorubicin. It seems likely that if these intercalating topoisomerase II poisons are structurally modified to also be DNA alkylating agents, they will have increased dwell time on the topoisomerase II-DNA complex and increased potency and selectivity for cancer cells. On the basis of insights into the mechanisms of action of psorospermin and the quinobenzoxazine A-62176 and mol. modeling studies of these compds. with duplex DNA, we have designed and synthesized novel hybrid DNA-interactive compds. that alkylate DNA most efficiently at sequences directed by topoisomerase II. The epoxysulfonamide ring of psorospermin was used as a DNA alkylating moiety, and this was fused to

L4 ANSWER 6 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)  
 the pyridobenzophenoxazine ring of A-62176, giving for example hybrid epoxide-3 I. The chlorohydrin ring opened form of the epoxide, II, was also prepd. and tested. II was prepd. by reacting the N-BOC protected mesylate with 18-crown-6/K<sub>2</sub>CO<sub>3</sub>/acetone to form the epoxide which was treated with aq. HCl/EtOAc to remove the BOC group and form the chlorohydrin. These hybrid compds. showed enhanced DNA alkylating activity in the presence of topoisomerase II, exhibited significant activity against all the cancer cells tested at submicromolar concns., and were more potent than both parent compds. However, the biochem. assays indicated that they lost some of the topoisomerase II and Mg<sup>2+</sup> dependency for reaction with DNA that is assoc. with psorospermin and A-62176, resp.

IT 111783-54-1, A-62176  
 RL: BSU (Biological study, unclassified); BIOL (Biological study)  
 (preparation of psorospermin/quinoxaline hybrids, their DNA alkylating activity in presence of human topoisomerase II, and their cytotoxicity against cancer cells)

RN 111783-54-1 CAPLUS  
 CN 3H-Pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid, 6-(3-amino-1-pyrrolidinyl)-5-fluoro-3-oxo-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

IT 586963-85-1P 586963-86-2P  
 RL: BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)  
 (preparation of psorospermin/quinoxaline hybrids, their DNA alkylating activity in presence of human topoisomerase II, and their cytotoxicity against cancer cells)

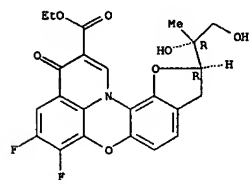
RN 586963-85-1 CAPLUS  
 CN 10H-Furo[2,3-a]pyrido[3,2,1-kl]phenoxazine-11-carboxylic acid, 7-(3-amino-1-pyrrolidinyl)-8-fluoro-2,3-dihydro-2-[(2R)-2-methylxiranyl]-10-oxo-, (2R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

L4 ANSWER 6 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)  
 (prepn. of psorospermin/quinoxaline hybrids, their DNA alkylating activity in presence of human topoisomerase II, and their cytotoxicity against cancer cells)

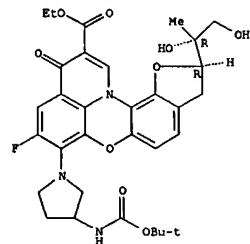
RN 586963-79-3 CAPLUS  
 CN 10H-Furo[2,3-a]pyrido[3,2,1-kl]phenoxazine-11-carboxylic acid, 2-[(1R)-1,2-dihydroxy-1-methylethyl]-7-[3-[(1,1-dimethylethoxy)carbonyl]amino]-1-pyrrolidinyl]-8-fluoro-2,3-dihydro-10-oxo-, ethyl ester, (2R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



RN 586963-80-6 CAPLUS  
 CN 10H-Furo[2,3-a]pyrido[3,2,1-kl]phenoxazine-11-carboxylic acid, 2-[(1R)-1,2-dihydroxy-1-methylethyl]-7-[3-[(1,1-dimethylethoxy)carbonyl]amino]-1-pyrrolidinyl]-8-fluoro-2,3-dihydro-10-oxo-, ethyl ester, (2R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



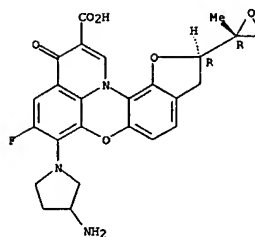
RN 586963-81-7 CAPLUS  
 CN 10H-Furo[2,3-a]pyrido[3,2,1-kl]phenoxazine-11-carboxylic acid, 2-[(1R)-1,2-dihydroxy-1-methylethyl]-7-[3-[(1,1-dimethylethoxy)carbonyl]amino]-1-pyrrolidinyl]-8-fluoro-2,3-dihydro-10-oxo-, (2R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

<02/09/2006>

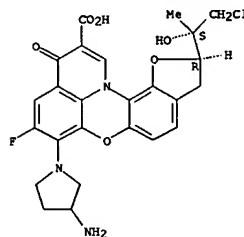
Habte

L4 ANSWER 6 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



RN 586963-86-2 CAPLUS  
 CN 10H-Furo[2,3-a]pyrido[3,2,1-kl]phenoxazine-11-carboxylic acid, 7-(3-amino-1-pyrrolidinyl)-2-[(1R)-2-chloro-1-hydroxy-1-methylethyl]-8-fluoro-2,3-dihydro-10-oxo-, monohydrochloride, (2S)-rel- (9CI) (CA INDEX NAME)

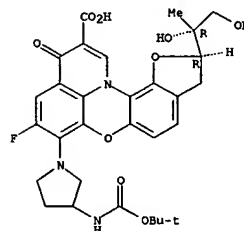
Relative stereochemistry.



● HCl

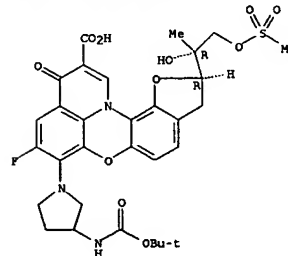
IT 586963-79-3P 586963-80-6P 586963-81-7P  
 586963-82-8P 586963-83-9P 586963-84-0P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

L4 ANSWER 6 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



RN 586963-82-8 CAPLUS  
 CN 10H-Furo[2,3-a]pyrido[3,2,1-kl]phenoxazine-11-carboxylic acid, 7-[3-[(1,1-dimethylethoxy)carbonyl]amino]-1-pyrrolidinyl]-8-fluoro-2,3-dihydro-2-[(1R)-1-hydroxy-1-methyl-2-[(methylsulfonyl)oxy]ethyl]-10-oxo-, (2R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

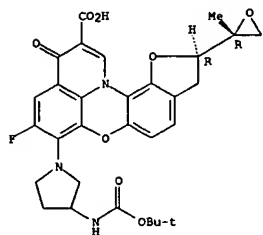


RN 586963-83-9 CAPLUS  
 CN 10H-Furo[2,3-a]pyrido[3,2,1-kl]phenoxazine-11-carboxylic acid, 7-[3-[(1,1-dimethylethoxy)carbonyl]amino]-1-pyrrolidinyl]-8-fluoro-2,3-dihydro-2-[(2R)-2-methylxiranyl]-10-oxo-, (2R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

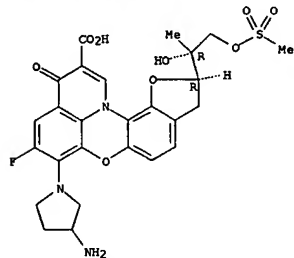


L4 ANSWER 6 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



RN 586963-84-0 CAPLUS  
 CN 10H-Puro[2,3-a]pyrido[3,2,1-kl]phenoxazine-11-carboxylic acid,  
 7-(3-amino-1-pyrrolidinyl)-8-fluoro-2,3-dihydro-2-[(1R)-1-hydroxy-1-methyl-  
 2-[(methylsulfonyl)oxy]ethyl]-10-oxo-, (2R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



REFERENCE COUNT: 43 THERE ARE 43 CITED REFERENCES AVAILABLE FOR THIS  
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 7 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN

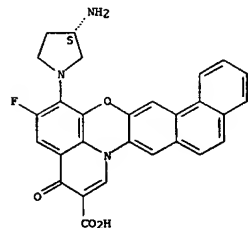
ACCESSION NUMBER: 2003:13459 CAPLUS  
 DOCUMENT NUMBER: 138:204998  
 TITLE: Design, Synthesis, and Biological Evaluation of a  
 Series of Fluoroquinolone Anthraquinones with Contrasting  
 Dual Mechanisms of Action against Topoisomerase II and  
 G-Quadruplexes  
 AUTHOR(S): Kim, Mu-Yong; Duan, Wenhu; Gleason-Guzman, Mary;  
 Hurley, Laurence H.  
 CORPORATE SOURCE: College of Pharmacy, University of Arizona, Tucson,  
 AZ, 85721, USA  
 SOURCE: Journal of Medicinal Chemistry (2003), 46(4), 571-583  
 CODEN: JMCMAH; ISSN: 0022-2623  
 PUBLISHER: American Chemical Society  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 138:204998

AB Topoisomerase inhibitors are important and clin. effective drugs, while  
 G-quadruplex-interactive compds. that disrupt telomere maintenance  
 mechanisms have yet to be proven useful in the clinic. If  
 G-quadruplex-interactive compds. are to be clin. useful, it will most  
 likely be in combination with more established cytotoxic agents. A family  
 of topoisomerase II inhibitors that also interact with G-quadruplexes was  
 previously reported. On the basis of previously established  
 structure-activity relationships (SARs) for compds. that are able to  
 inhibit topoisomerase II or interact with G-quadruplex to varying degrees,  
 four new fluoroquinolone anthraquinones (FQAs) with different profiles of mixed  
 topoisomerase II poisoning effects and G-quadruplex interactions were  
 designed and synthesized. The biol. profiles of the four new compds. were  
 determined with respect to G-quadruplex interaction (polymerase stop and  
 photocleavage assays) and topoisomerase II interaction (DNA cleavage and  
 KUNA decatenation assays), alongside cytotoxicity tests with matched pairs  
 of topoisomerase II-resistant and topoisomerase II-sensitive cells and  
 with telomerase (+) and ALT (+) cell lines (ALT = alternative lengthening  
 of telomeres). From this study, two FQAs with sharply contrasting  
 profiles of potent G-quadruplex interaction with a weak topoisomerase II  
 poisoning effect, and vice versa, were identified for further evaluation  
 to determine the optimum combination of these activities in subsequent  
 vivo studies.

IT 237424-96-3P 237424-98-5P 500005-02-7P  
 500005-03-8P 500005-06-1P 500005-07-2P  
 500005-08-3P 500005-09-4P  
 RL: PAC (Pharmacological activity); SPN (Synthetic preparation); BIOL  
 (Biological study); PREP (Preparation)  
 (preparation of fluoroquinolone anthraquinones from 2,3,4,5-tetrafluorobenzoyl  
 acetate as potential dual topoisomerase II inhibitors and G-quadruplex  
 interactive compds. and antitumor activity)  
 RN 237424-96-3 CAPLUS  
 CN 3H-Naphtho[2,1-b]pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid,  
 6-[(3R)-3-amino-1-pyrrolidinyl]-5-fluoro-3-oxo- (9CI) (CA INDEX NAME)

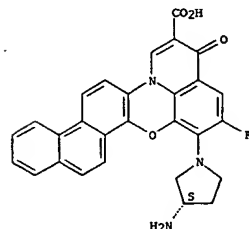
Absolute stereochemistry.

L4 ANSWER 7 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



RN 237424-98-5 CAPLUS  
 CN 10H-Naphtho[1,2-c]pyrido[3,2,1-kl]phenoxazine-9-carboxylic acid,  
 13-[(3R)-3-amino-1-pyrrolidinyl]-12-fluoro-10-oxo- (9CI) (CA INDEX NAME)

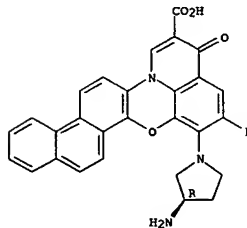
Absolute stereochemistry.



RN 500005-02-7 CAPLUS  
 CN 10H-Naphtho[1,2-c]pyrido[3,2,1-kl]phenoxazine-9-carboxylic acid,  
 13-[(3R)-3-amino-1-pyrrolidinyl]-12-fluoro-10-oxo- (9CI) (CA INDEX NAME)

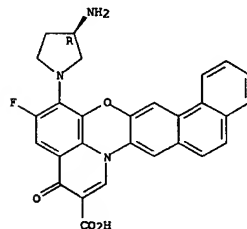
Absolute stereochemistry.

L4 ANSWER 7 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



RN 500005-03-8 CAPLUS  
 CN 3H-Naphtho[2,1-b]pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid,  
 6-[(3R)-3-amino-1-pyrrolidinyl]-5-fluoro-3-oxo- (9CI) (CA INDEX NAME)

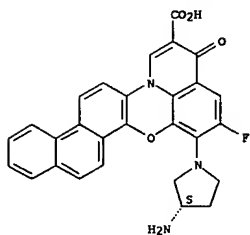
Absolute stereochemistry.



RN 500005-06-1 CAPLUS  
 CN 10H-Naphtho[1,2-c]pyrido[3,2,1-kl]phenoxazine-9-carboxylic acid,  
 13-[(3S)-3-amino-1-pyrrolidinyl]-12-fluoro-10-oxo-, monohydrochloride  
 (9CI) (CA INDEX NAME)

Absolute stereochemistry.

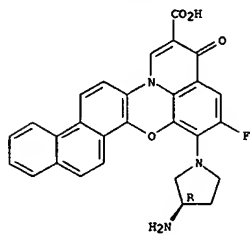
L4 ANSWER 7 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



● HCl

RN 500005-07-2 CAPLUS  
 CN 10H-Naphtho[1,2-c]pyrido[3,2,1-kl]phenoxazine-9-carboxylic acid,  
 13-[(3R)-3-amino-1-pyrrolidinyl]-12-fluoro-10-oxo-, monohydrochloride  
 (9CI) (CA INDEX NAME)

Absolute stereochemistry.



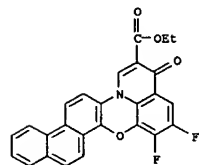
● HCl

RN 500005-08-3 CAPLUS  
 CN 3H-Naphtho[2,1-b]pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid,  
 6-[(3S)-3-amino-1-pyrrolidinyl]-5-fluoro-3-oxo-, monohydrochloride (9CI)

L4 ANSWER 7 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

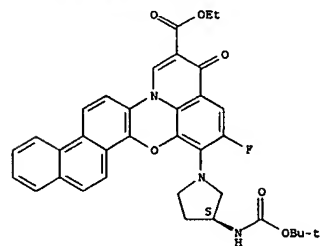
IT 500004-96-6P 500004-97-7P 500004-99-9P  
 500005-00-5P 500005-01-6P 500005-04-9P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
 (Reactant or reagent)  
 (preparation of fluoroquinolones from 2,3,4,5-tetrafluorobenzoyl  
 acetate as potential dual topoisomerase II inhibitors and G-quadruplex  
 interactive compds. and antitumor activity)

RN 500004-96-6 CAPLUS  
 CN 10H-Naphtho[1,2-c]pyrido[3,2,1-kl]phenoxazine-9-carboxylic acid,  
 12,13-difluoro-10-oxo-, ethyl ester (9CI) (CA INDEX NAME)



RN 500004-97-7 CAPLUS  
 CN 10H-Naphtho[1,2-c]pyrido[3,2,1-kl]phenoxazine-9-carboxylic acid,  
 13-[(3S)-3-[(1,1-dimethylethoxy)carbonyl]amino]-1-pyrrolidinyl]-12-fluoro-  
 10-oxo-, ethyl ester (9CI) (CA INDEX NAME)

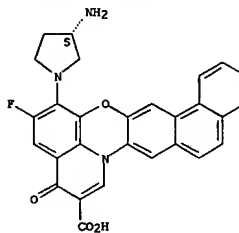
Absolute stereochemistry.



RN 500004-99-9 CAPLUS  
 CN 3H-Naphtho[2,1-b]pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid,  
 5,6-difluoro-3-oxo-, ethyl ester (9CI) (CA INDEX NAME)

L4 ANSWER 7 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

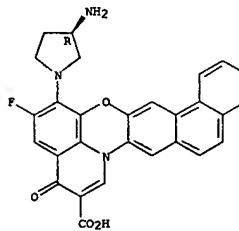
Absolute stereochemistry.



● HCl

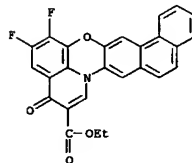
RN 500005-09-4 CAPLUS  
 CN 3H-Naphtho[2,1-b]pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid,  
 6-[(3R)-3-amino-1-pyrrolidinyl]-5-fluoro-3-oxo-, monohydrochloride (9CI)  
 (CA INDEX NAME)

Absolute stereochemistry.



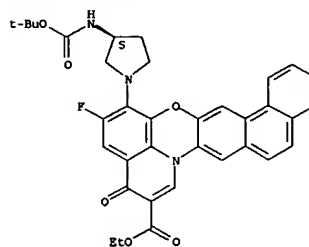
● HCl

L4 ANSWER 7 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



RN 500005-00-5 CAPLUS  
 CN 3H-Naphtho[2,1-b]pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid,  
 6-[(3S)-3-[(1,1-dimethylethoxy)carbonyl]amino]-1-pyrrolidinyl]-5-fluoro-3-  
 oxo-, ethyl ester (9CI) (CA INDEX NAME)

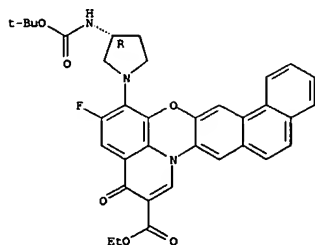
Absolute stereochemistry.



RN 500005-01-6 CAPLUS  
 CN 3H-Naphtho[2,1-b]pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid,  
 6-[(3R)-3-[(1,1-dimethylethoxy)carbonyl]amino]-1-pyrrolidinyl]-5-fluoro-3-  
 oxo-, ethyl ester (9CI) (CA INDEX NAME)

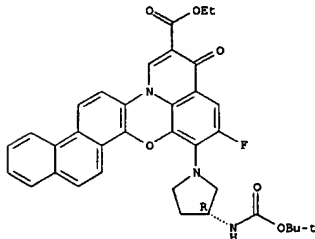
Absolute stereochemistry.

L4 ANSWER 7 OF 36 CAPLUS COPYRIGHT 2006 ACS ON STN (Continued)



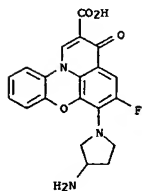
RN 500005-04-9 CAPLUS  
 CN 10H-Naphtho[1,2-c]pyrido[3,2,1-kl]phenoxazine-9-carboxylic acid,  
 13-[(3R)-3-[[[(1,1-dimethylethoxy)carbonyl]amino]-1-pyrrolidinyl]-12-fluoro-  
 10-oxo-, ethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 39 THERE ARE 39 CITED REFERENCES AVAILABLE FOR THIS  
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

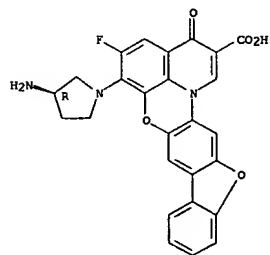
L4 ANSWER 8 OF 36 CAPLUS COPYRIGHT 2006 ACS ON STN (Continued)



● HCl

IT 237425-11-3P 496922-34-0P 496922-35-1P  
 RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU  
 (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES  
 (Uses)  
 (design, synthesis and cytotoxicity of fluoroquinophenoxazines that  
 interact with human telomeric G-quadruplexes)  
 RN 237425-11-5 CAPLUS  
 CN 3H-Benzofuro[2,3-b]pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid,  
 6-[(3R)-3-amino-1-pyrrolidinyl]-5-fluoro-3-oxo-, monohydrochloride (9CI)  
 (CA INDEX NAME)

Absolute stereochemistry.



● HCl

RN 496922-34-0 CAPLUS  
 CN 3H-Benzofuro[2,3-b]pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid,  
 6-[(3R)-3-[[[(1,1-dimethylethoxy)carbonyl]amino]-1-pyrrolidinyl]-5-fluoro-3-  
 oxo-, monohydrochloride (9CI) (CA INDEX NAME)

&lt;02/09/2006&gt;

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L4 ANSWER 8 OF 36 CAPLUS COPYRIGHT 2006 ACS ON STN

ACCESSION NUMBER: 2002:550577 CAPLUS  
 DOCUMENT NUMBER: 138:162967  
 TITLE: Design and synthesis of fluoroquinophenoxazines that  
 interact with human telomeric G-quadruplexes and their  
 biological effects  
 AUTHOR(S): Duan, Wenhui; Rangan, Anupama; Vankayalapati,  
 Hariprasad; Kim, Mu-Yong; Zeng, Qingping; Sun, Daekyu;  
 Han, Haiyong; Fedoroff, Oleg Yu.; Nishioka, David;  
 Rha, Sun Young; Izbička, Elzbieta; Von Hoff, Daniel  
 D.; Hucley, Laurence H.  
 CORPORATE SOURCE: College of Pharmacy, The University of Texas, Austin,  
 TX, 78712, USA  
 SOURCE: Molecular Cancer Therapeutics (2001), 1(2), 103-120  
 CODEN: MCTOCT; ISSN: 1535-7163  
 PUBLISHER: American Association for Cancer Research  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 138:162967

AB In this study we have identified a new structural motif for a ligand with  
 G-quadruplex interaction that results in biol. effects associated with  
 G-quadruplex-interactive compds. Fluoroquinolones have been reported to  
 possess weak telomerase inhibitory activity in addition to their better  
 known

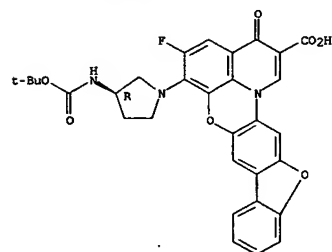
bacterial gyrase poisoning. Starting with a fluoroquinobenzoxazine, which  
 has modest potency in a human topoisomerase II assay, we have designed a  
 more potent inhibitor of telomerase that has lost its topoisomerase II  
 poisoning activity. This fluoroquinophenoxazine (FQP) interacts with  
 G-quadruplex structures to inhibit the progression of Taq polymerase in a  
 G-quadruplex polymerase stop assay. In addition, we demonstrate by 1H NMR  
 studies that this compound interacts with telomeric G-quadruplex structures  
 by external stacking to the G-tetrad with both the unimol. fold-over and  
 the parallel G-quadruplex structures. A photocleavage assay confirms the  
 FQP interaction site, which is located off center of the external tetrad  
 but within the loop region. Mol. modeling using simulated annealing was  
 performed on the FQP-parallel G-quadruplex complex to determine the optimum

FQP orientation and key mol. interactions with the telomeric G-quadruplex  
 structure. On the basis of the results of these studies, two addnl. FQP  
 analogs were synthesized, which were designed to test the importance of  
 these key interactions. These analogs were evaluated in the Taq  
 polymerase stop assay for G-quadruplex interaction. The data from this  
 study and the biol. evaluation of these three FQPs, using cytotoxicity and  
 a sea urchin embryo system, were in accord with the predicted more potent  
 telomeric G-quadruplex interactions of the initial lead compound and one of  
 the analogs. On the basis of these structural and biol. studies, the  
 design of more potent and selective telomeric G-quadruplex-interactive  
 compds. can be envisaged.

IT 111783-54-1, A-62176  
 RL: BSU (Biological study, unclassified); BIOL (Biological study)  
 (design, synthesis and cytotoxicity of fluoroquinophenoxazines that  
 interact with human telomeric G-quadruplexes)  
 RN 111783-54-1 CAPLUS  
 CN 3H-Pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid, 6-[(3-amino-1-  
 pyrrolidinyl)-5-fluoro-3-oxo-, monohydrochloride (9CI) (CA INDEX NAME)

L4 ANSWER 8 OF 36 CAPLUS COPYRIGHT 2006 ACS ON STN (Continued)

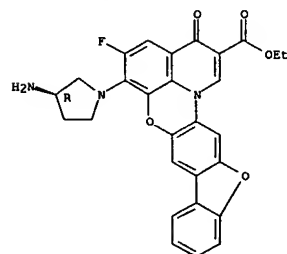
Absolute stereochemistry.



● HCl

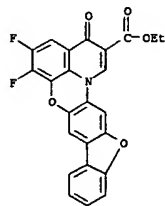
RN 496922-35-1 CAPLUS  
 CN 3H-Benzofuro[2,3-b]pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid,  
 6-[(3R)-3-amino-1-pyrrolidinyl]-5-fluoro-3-oxo-, ethyl ester (9CI) (CA  
 INDEX NAME)

Absolute stereochemistry.



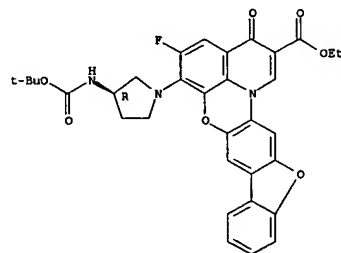
IT 237425-19-3P 237425-21-7P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
 (Reactant or reagent)  
 (design, synthesis and cytotoxicity of fluoroquinophenoxazines that  
 interact with human telomeric G-quadruplexes)  
 RN 237425-19-3 CAPLUS  
 CN 3H-Benzofuro[2,3-b]pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid,  
 5,6-difluoro-3-oxo-, ethyl ester (9CI) (CA INDEX NAME)

L4 ANSWER 8 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



RN 237425-21-7 CAPLUS  
 CN 3H-Benzofuro[2,3-b]pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid, 6-[(3R)-3-[(1,1-dimethylethoxy)carbonylamino]-1-pyrrolidinyl]-5-fluoro-3-oxo-, ethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 67 THERE ARE 67 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 9 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN

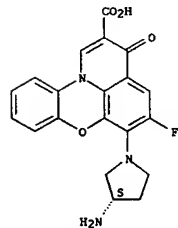
ACCESSION NUMBER: 2000:507046 CAPLUS  
 DOCUMENT NUMBER: 133:232451  
 TITLE: Efficient, Mg<sup>2+</sup>-Dependent Photochemical DNA Cleavage by the Antitumor Quinobenzoxazine (S)-A-62176  
 AUTHOR(S): Yu, Hongtao; Kwok, Yan; Hurley, Laurence H.; Kerwin, Sean Michael  
 CORPORATE SOURCE: Division of Medicinal Chemistry and Institute for Cellular and Molecular Biology, The University of Texas at Austin, Austin, TX, 78712, USA  
 SOURCE: Biochemistry (2000), 39(33), 10236-10246  
 CODEN: BICHAU; ISSN: 0006-2960  
 PUBLISHER: American Chemical Society  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English

AB The quinobenzoxazines, a group of structural analogs of the antibacterial fluoroquinolones, are topoisomerase II inhibitors that have demonstrated promising anticancer activity in mice. It has been proposed that the quinobenzoxazines form a 2:2 drug-Mg<sup>2+</sup> self-assembly complex on DNA. The quinobenzoxazine (S)-A-62176 is photochem. unstable and undergoes a DNA-accelerated photochem. reaction to afford a highly fluorescent photoproduct. Here we report that the irradiation of both supercoiled DNA and DNA oligonucleotides in the presence of (S)-A-62176 results in photochem. cleavage of the DNA. The (S)-A-62176-mediated DNA photocleavage reaction requires Mg<sup>2+</sup>. Photochem. cleavage of supercoiled DNA by (S)-A-62176 is much more efficient than the DNA photocleavage reactions of the fluoroquinolones norfloxacin, ciprofloxacin, and enoxacin. The photocleavage of supercoiled DNA by (S)-A-62176 is unaffected by the presence of SOD, catalase, or other reactive oxygen scavengers, but is inhibited by deoxygenation. The photochem. cleavage of supercoiled DNA is also inhibited by 1 mM KI. Photochem. cleavage of DNA oligonucleotides by (S)-A-62176 occurs most extensively at DNA sites bound by drug, as determined by DNase I footprinting, and especially at certain G and T residues. The nature of the DNA photoproducts, and inhibition studies, indicate that the photocleavage reaction occurs by a free radical mechanism initiated by abstraction of the 4'- and 1'-hydrogens from the DNA minor groove. These results lend further support for the proposed DNA binding model for the quinobenzoxazine 2:2 drug-Mg<sup>2+</sup> complex and serve to define the position of this complex on the minor groove of DNA.

IT 155035-57-7, (S)-A-62176  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (efficient, Mg<sup>2+</sup>-dependent photochem. DNA cleavage by the antitumor quinobenzoxazine (S)-A-62176)  
 RN 155035-57-7 CAPLUS  
 CN 3H-Pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid, 6-[(3S)-3-amino-1-pyrrolidinyl]-5-fluoro-3-oxo- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L4 ANSWER 9 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



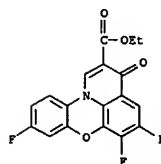
REFERENCE COUNT: 43 THERE ARE 43 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 10 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2000:228541 CAPLUS  
 DOCUMENT NUMBER: 133:259  
 TITLE: The quinobenzoxazines: relationship between DNA binding and biological activity  
 AUTHOR(S): Kwok, Yan; Sun, Daekyu; Clement, Jacob J.; Hurley, Laurence H.  
 CORPORATE SOURCE: Drug Dynamics Institute, College of Pharmacy, The University of Texas at Austin, Austin, TX, 78712-1074, USA  
 SOURCE: Anti-Cancer Drug Design (1999), 14(5), 443-450  
 CODEN: ACDDEA; ISSN: 0266-9536  
 PUBLISHER: Oxford University Press  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English

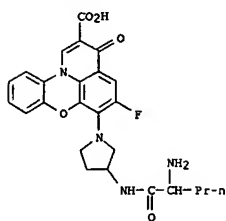
AB The quinobenzoxazine compds., derived from antibacterial quinolones, is active in vitro and in vivo against murine and human tumors. In this contribution, we show that the relative DNA binding affinity of the quinobenzoxazine compds. correlates with their cytotoxicity, their ability to inhibit gyrase-DNA complex formation, and the decatenation of kinetoplast DNA by human topoisomerase II. DNA binding studies with the decarboxy-A-62176 analog indicate that the  $\beta$ -keto acid moiety of the quinobenzoxazine compds. plays an important role in their interaction with DNA.

IT 110943-87-8 142136-44-5 155035-43-1  
 155035-57-7 155035-58-8 155035-94-2  
 155036-17-2 157744-30-4  
 RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)  
 (relationship between binding of quinobenzoxazine compds. to DNA and biol. activity)  
 RN 110943-87-8 CAPLUS  
 CN 3H-Pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid, 5,6,9-trifluoro-3-oxo-, ethyl ester (9CI) (CA INDEX NAME)

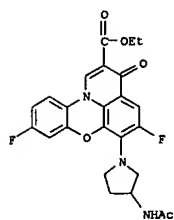


RN 142136-44-5 CAPLUS  
 CN 3H-Pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid, 6-[3-[(2-amino-1-oxopentyl)amino]-1-pyrrolidinyl]-5-fluoro-3-oxo- (9CI) (CA INDEX NAME)

L4 ANSWER 10 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



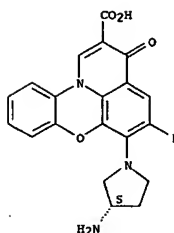
RN 155035-43-1 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[3-(acetylamino)-1-pyrrolidinyl]-5,9-difluoro-3-oxo-, ethyl ester (9CI) (CA INDEX NAME)



RN 155035-57-7 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[(3S)-3-amino-1-pyrrolidinyl]-5-fluoro-3-oxo- (9CI) (CA INDEX NAME)

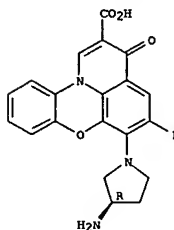
Absolute stereochemistry.

L4 ANSWER 10 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



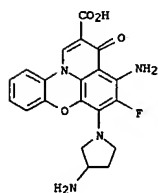
RN 155035-58-8 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[(3R)-3-amino-1-pyrrolidinyl]-5-fluoro-3-oxo- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

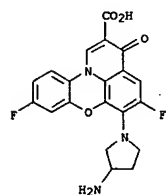


RN 155035-94-2 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 4-amino-6-(3-amino-1-pyrrolidinyl)-5-fluoro-3-oxo- (9CI) (CA INDEX NAME)

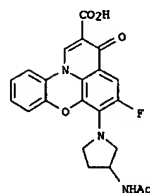
L4 ANSWER 10 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



RN 155036-17-2 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-(3-amino-1-pyrrolidinyl)-5,9-difluoro-3-oxo- (9CI) (CA INDEX NAME)



RN 157744-30-4 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[3-(acetylamino)-1-pyrrolidinyl]-5-fluoro-3-oxo- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS

&lt;02/09/2006&gt;

Habte

L4 ANSWER 11 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN  
ACCESSION NUMBER: 2000:160671 CAPLUS  
DOCUMENT NUMBER: 132:289681  
TITLE: Use of catalytic topoisomerase II inhibitors to probe mechanisms of chemical-induced clastogenicity in chinese hamster V79 cells  
AUTHOR(S): Snyder, Ronald D.  
CORPORATE SOURCE: Abbott Laboratories, Abbott Park, IL, USA  
SOURCE: Environmental and Molecular Mutagenesis (2000), 35(1), 13-21  
CODEN: EMMUEG; ISSN: 0893-6692  
PUBLISHER: Wiley-Liss, Inc.  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
AB Determination of the clastogenic potential of new chemical entities, particularly

pharmaceuticals, is an important part of the overall safety assessment of such drugs. It is appreciated that clastogenicity can arise from perturbation of many different cellular processes distinct from direct DNA/drug interactions. One such alternative clastogenic process is inhibition of DNA topoisomerase II, during which process the topoisomerase/DNA/drug ternary complex forms stable DNA double-strand breaks (cleavable complex), which become templates for recombinational, mutagenic, and chromosomal fragmentation events. Without extensive experimentation, it is generally not possible to distinguish clastogenicity arising from direct drug/DNA interaction from that arising from inhibition of topoisomerase II. In the present investigation, we demonstrate that specific catalytic inhibitors of DNA topoisomerase II reduce the clastogenicity of topoisomerase poisons but not that arising via non-topoisomerase-dependent mechanisms. In particular, it is shown that catalytic topoisomerase II inhibitors such as chloroquine, sodium azide, and A-74932, as well as certain intercalating agents such as 9-aminoacridine and ethidium bromide, strongly antagonize the formation of micronuclei induced by the DNA gyrase inhibitor ciprofloxacin and the antitumor topoisomerase II poison etoposide. These catalytic inhibitors are also shown to antagonize the clastogenicity of exptl. compds. and novel pharmaceuticals presumed to be DNA intercalating agents by virtue of their response in a cell-based bleomycin amplification assay. We extend our previous hypothesis, suggesting that the clastogenicity of some nonstructurally alerting drugs may be due to an as yet unappreciated propensity for DNA intercalation. It is further proposed that intercalation-dependent inhibition of DNA topoisomerase II may be responsible for this clastogenicity and that this may be detected in intact mammalian cells with the use of catalytic topoisomerase inhibitors.

IT 148201-60-9, A-74932  
RI: ADV (Adverse effect, including toxicity); BIOL (Biological study)  
(use of catalytic topoisomerase II inhibitors to probe mechanisms of chemical-induced clastogenicity in chinese hamster V79 cells)  
RN 148201-60-9 CAPLUS  
CN 3H-Pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid, 6-[2-[(2-amino-1-oxopentyl)amino]-1-pyrrolidinyl]-5-fluoro-3-oxo-, monohydrochloride (9CI) (CA INDEX NAME)

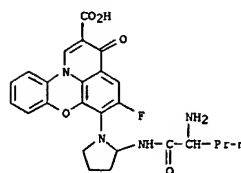
L4 ANSWER 12 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN  
ACCESSION NUMBER: 1999:795688 CAPLUS  
DOCUMENT NUMBER: 132:35333  
TITLE: Multibinding inhibitors of topoisomerase  
INVENTOR(S): Linsell, Martin S.; Meier-Davis, Susan; Griffin, John H.  
PATENT ASSIGNEE(S): Advanced Medicine, Inc., USA  
SOURCE: PCT Int. Appl., 142 pp.  
CODEN: P1XXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 31  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9964054	A1	19991216	WO 1999-US12908	19990608
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, GR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CN, GA, GW, GU, HK, HR, KE, KW, TD, TG				
US 6288234	B1	20010911	US 1999-325662	19990604
SG 106036	A1	20040930	SG 1999-2845	19990607
CA 2321166	AA	19991216	CA 1999-2321166	19990608
AU 9946771	A1	19991230	AU 1999-46771	19990608
EP 1085891	A1	20010328	EP 1999-930179	19990608
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
SG 80631	A1	20010522	SG 1999-2719	19990608
SG 90053	A1	20020723	SG 1999-2944	19990608
US 6566509	B1	20030520	US 1999-327899	19990608
ZA 200004086	A	20010810	ZA 2000-4086	20000810
ZA 200004558	A	20011130	ZA 2000-4558	20000831
ZA 200004559	A	20020402	ZA 2000-4559	20000831
US 2002028943	A1	20020307	US 2001-760827	20010117
US 2004023290	A1	20040205	US 2002-161279	20020603
US 2003176670	A1	20030918	US 2002-330381	20021227

PRIORITY APPLN. INFO.:

AB Novel topoisomerase inhibitors that act as multibinding agents, LpXn [where L = a ligand capable of binding to topoisomerase; X = a linker; p = 2-10; q = 1-20; the distance between ligands 2-50 Å], are disclosed. Combinatorial arrays, methods of synthesis, and methods of assaying the dimeric and multimeric compds. are also embodied by the invention. A number of divalent prophetic examples, derived from substituted fused ring heterocyclic ligands and difunctional linkers, are given. Compds. of this invention are useful in the treatment and prevention of cancer and microbial infections (no data). The multibinding compds. provide greater biol. and/or therapeutic effects than the aggregate of the unlinked ligands due to their multibinding properties (no data). Ligands may include A-62176, A-74932, acridine carboxamides, actinomycin D, AD-312,

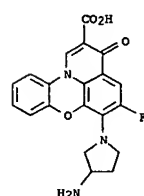
L4 ANSWER 11 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



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REFERENCE COUNT: 30 THERE ARE 30 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

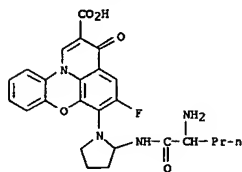
L4 ANSWER 12 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)  
AD-347, ADMA, AMP-53, amrubicin, amescrine, anthracyclines, asulacrine, axonafide, azatoxin, BBR-2778, BMY-43748, BO-2367, bromodeoxyuridine, C-1310, C-1311, CC-131, CJ-12373, CI-937, CI-920 (fosfostriecin), CP-115953, camptothecin, daunorubicin, doxorubicin, DuP 937 (loxoxathrone), DuP 941, elinafide, ellipticine-estradiol (conjugates), elsamitrucin, ER-37328, etoposide, fleroxacin, GI-149993, GL-331, GR-122222X, ICRF-154, ICRF-193, idarubicin, iododoworubicin, IST-622, KQ-10018, intoplicine, lomofloxacin, losoxantrone, N-AMSA, nerbarone, meraboin, mitonafide, mitoxantrone, morindone, NCA-0465, NK-109, NK-611, NSC-655649, NSC-665517, NSC-675967, pazelliptine, pazufloxacin, PD-131112, piroxantrone, pyridobenzophenoxazine, S-16020-2, saintopin, sitafloxacin hydrate, SN-22995, sobuzoxane, SR-103, TAS-103, teloxantrone, teniposide, TLC-D-99, top-53, topotecan, tosufloxacin, TRK-710, trovafloxacin, UCE-6, VM-26, VP-16, VSR, WIN-33377, WIN-58161, WIN-645593, WQ-2743, WQ-3034, WR-63320, XR-5942, XR-5000, and 773092.  
IT 111783-54-1DP, A-62176, dimeric and multimeric derivs. of 148201-60-9DP, A-74932, dimeric and multimeric derivs. of  
RI: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(target compound: preparation of multibinding inhibitors of topoisomerase as anticancer and antimicrobial agents)  
RN 111783-54-1 CAPLUS  
CN 3H-Pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid, 6-(3-amino-1-pyrrolidinyl)-5-fluoro-3-oxo-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

RN 148201-60-9 CAPLUS  
CN 3H-Pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid, 6-[2-[(2-amino-1-oxopentyl)amino]-1-pyrrolidinyl]-5-fluoro-3-oxo-, monohydrochloride (9CI) (CA INDEX NAME)

L4 ANSWER 12 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

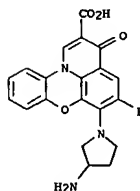


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REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 13 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1999:703230 CAPLUS  
DOCUMENT NUMBER: 132:18571  
TITLE: 31P-NMR as a probe for drug-nucleic acid interactions  
AUTHOR(S): Seaman, Frederick C.; Hurley, Laurence H.  
CORPORATE SOURCE: Drug Dynamics Institute, The University of Texas at Austin, Austin, TX, 78712, USA  
SOURCE: Phosphorus, Sulfur and Silicon and the Related Elements (1999), 144-146, 297-300  
CODEN: PSSLEC; ISSN: 1042-6507  
PUBLISHER: Gordon & Breach Science Publishers  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
AB The structural impact of covalent and noncovalent interactions of drugs with DNA is an important component for understanding the biochem. and biol. consequences of DNA damage. Work in this laboratory has focused on a number of potentially therapeutically important drugs that distort DNA by unwinding, bending DNA into the major or minor groove. These lead to enhanced recognition of DNA by proteins involved in transcription and replication. In this paper, the authors will present the structures of one of these complexes using the quinobenzoxazine compound A-62176 and show how 31P-NMR can be used to monitor these distortive effects.  
IT 111783-54-1, A-62176  
RL: BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study); PROC (Process)  
(31P-NMR as a probe for drug-nucleic acid interactions)  
RN 111783-54-1 CAPLUS  
CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-(3-amino-1-pyrrolidinyl)-5-fluoro-3-oxo-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

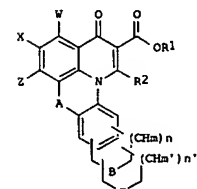
REFERENCE COUNT: 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 14 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN

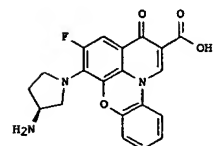
ACCESSION NUMBER: 1999:511161 CAPLUS  
DOCUMENT NUMBER: 131:153732  
TITLE: Synthesis of quinobenzoxazine analogs with topoisomerase II and quadruplex interactions for use as antineoplastic agents  
PATENT ASSIGNEE(S): Board of Regents, the University of Texas System, USA  
SOURCE: PCT Int. Appl., 84 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9940093	A2	19990812	WO 1999-US2400	19990204
WO 9940093	A3	20000127		
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TW				
RW: GH, GM, KE, LS, MW, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TW				
CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
AU 9926574	A1	19990823	AU 1999-26574	19990204
US 6528517	B1	20030304	US 1999-245019	19990204
PRIORITY APPLN. INFO.:		US 1998-73658P		P 19980204
		WO 1999-US2400		W 19990204

OTHER SOURCE(S): CASREACT 131:153732; MARPAT 131:153732  
G1



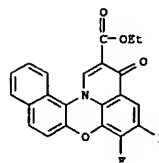
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II

L4 ANSWER 14 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

AB The invention discloses a novel quinobenzoxazine self-assembly complex on DNA and on the topoisomerase II-DNA complex. The related model is used to design and synthesize a new series of quinobenzoxazines, pyridonaphthophenoxazines, and other related compounds. (I) (m, m', n, n' = independently 0, 1, 2; A = O, S, C; B, C = independently M, O, S, C; CH2; X = H or halo; W = H, NO2, NH2, alkyl amino, haloalkyl, or halo; Z = halo or N-containing C1-6 group; R1 = H or carboxy-protecting group; R2 = H, halo, C1-6 alkyl) that may exhibit anticancer or antibiotic activity. Thus, Et 2,3,4,5-tetrafluorobenzoylacetate was loaded on a solid support resin by transesterification and refluxed in toluene in the presence of catalytic sats. of DMAP to form the solid-bound  $\beta$ -ketoester. The ester was treated with DMF di-Me acetal followed by 2-aminophenol in the presence of pyridine to generate the resin-bound enaminoketoester. The product was cyclized and further derivatized in three steps to yield 1-(5)-(3-aminopyrrolidin-1-yl)-2-fluoro-4-oxo-4H-pyrido[3,2,1-k]phenoxazine-5-carboxylic acid TFA salt (II.CF3CO2H). The anticancer activity of these compds. is thought to operate via stabilization of the topoisomerase II-DNA complex and/or interaction with G-quadruplexes, while the antibiotic activity of these compds. derives from their ability to inhibit gyrase, the bacterial type II topoisomerase. Decatenation inhibition, DNA unwinding, and cytotoxicity data for selected pyridobenzophenoxazines were given. For example, topoisomerase II inhibition was reported with IC50 values ranging from 0.22 to 1.84  $\mu$ M.  
IT 216501-08-5P 216501-10-9P 216501-18-7P  
216501-20-1P 216501-22-3P 216501-24-3P  
237425-15-9DP, resin-supported ester 237425-19-3P  
237425-20-6P 237425-21-7P 237425-25-1P  
237425-26-2P 237425-27-3P 237425-28-4P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(intermediate; synthesis of quinobenzoxazine analogs with topoisomerase II and quadruplex interactions for use as antineoplastic agents)  
RN 216501-08-5 CAPLUS  
CN 3H-Benzo[a]pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 5,6-difluoro-3-oxo-, ethyl ester (9CI) (CA INDEX NAME)

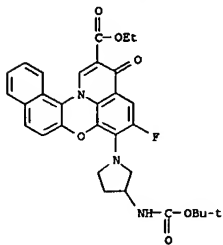


RN 216501-10-9 CAPLUS  
CN 3H-Benzo[a]pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[3-[[[1,1-dimethylethoxy]carbonyl]amino]-1-pyrrolidinyl]-5-fluoro-3-oxo-, ethyl ester (9CI) (CA INDEX NAME)

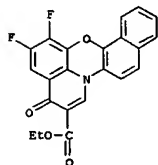
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L4 ANSWER 14 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

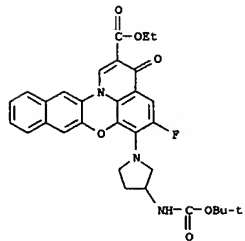


RN 216501-18-7 CAPLUS  
 CN 3H-Benzo[c]pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 5,6-difluoro-3-oxo-, ethyl ester (9CI) (CA INDEX NAME)

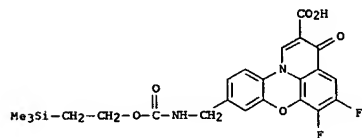


RN 216501-20-1 CAPLUS  
 CN 3H-Benzo[b]pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 5,6-difluoro-3-oxo-, ethyl ester (9CI) (CA INDEX NAME)

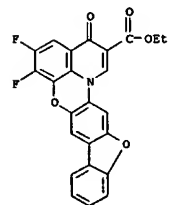
L4 ANSWER 14 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



RN 237425-15-9 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 5,6-difluoro-3-oxo-9-[[[2-(trimethylsilyl)ethoxy]carbonyl]amino]methyl]- (9CI) (CA INDEX NAME)

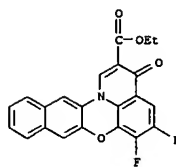


RN 237425-19-3 CAPLUS  
 CN 3H-Benzofuro[2,3-b]pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 5,6-difluoro-3-oxo-, ethyl ester (9CI) (CA INDEX NAME)

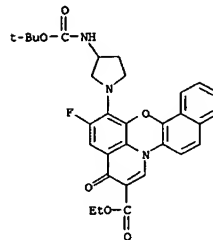


&lt;02/09/2006&gt;

L4 ANSWER 14 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



RN 216501-22-3 CAPLUS  
 CN 3H-Benzo[c]pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[3-[[[1,1-dimethylethoxy]carbonyl]amino]-1-pyrrolidinyl]-5-fluoro-3-oxo-, ethyl ester (9CI) (CA INDEX NAME)

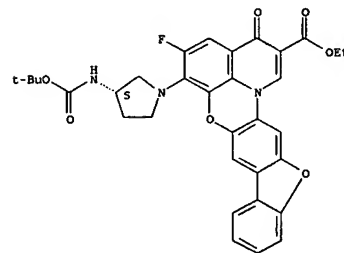


RN 216501-24-5 CAPLUS  
 CN 3H-Benzo[b]pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[3-[[[1,1-dimethylethoxy]carbonyl]amino]-1-pyrrolidinyl]-5-fluoro-3-oxo-, ethyl ester (9CI) (CA INDEX NAME)

L4 ANSWER 14 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

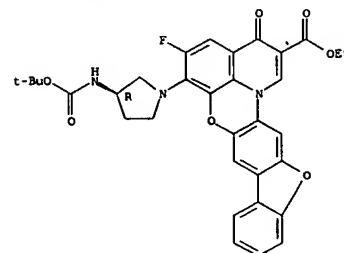
RN 237425-20-6 CAPLUS  
 CN 3H-Benzofuro[2,3-b]pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[(3S)-3-[[[1,1-dimethylethoxy]carbonyl]amino]-1-pyrrolidinyl]-5-fluoro-3-oxo-, ethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 237425-21-7 CAPLUS  
 CN 3H-Benzofuro[2,3-b]pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[(3R)-3-[[[1,1-dimethylethoxy]carbonyl]amino]-1-pyrrolidinyl]-5-fluoro-3-oxo-, ethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

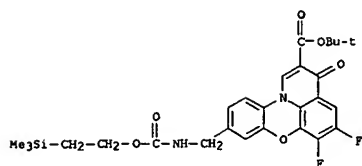


RN 237425-25-1 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 5,6-difluoro-3-oxo-9-[[[2-(trimethylsilyl)ethoxy]carbonyl]amino]methyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Habte

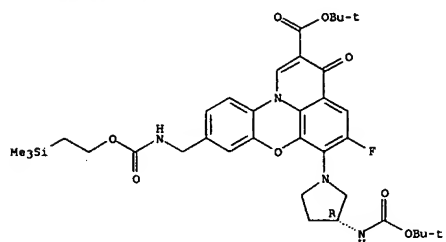


L4 ANSWER 14 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



RN 237425-26-2 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[(3R)-3-[[[(1,1-dimethylethoxy)carbonyl]amino]-1-pyrrolidinyl]-5-fluoro-3-oxo-9-[[[2-(trimethylsilyl)ethoxy]carbonyl]amino]methyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

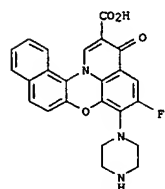
Absolute stereochemistry.



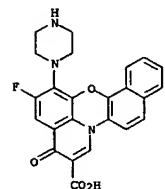
RN 237425-27-3 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 9-(aminomethyl)-6-[(3R)-3-[[[(1,1-dimethylethoxy)carbonyl]amino]-1-pyrrolidinyl]-5-fluoro-3-oxo-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L4 ANSWER 14 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (synthesis of quinobenzoxazine analogs with topoisomerase II and quadruplex interactions for use as antineoplastic agents)  
 RN 216501-43-8 CAPLUS  
 CN 3H-Benzo[a]pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 5-fluoro-3-oxo-6-(1-piperazinyl)- (9CI) (CA INDEX NAME)

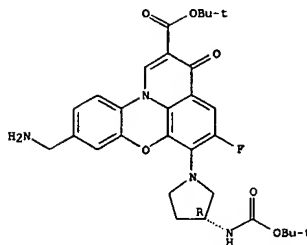


RN 216501-45-0 CAPLUS  
 CN 3H-Benzo[c]pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 5-fluoro-3-oxo-6-(1-piperazinyl)- (9CI) (CA INDEX NAME)



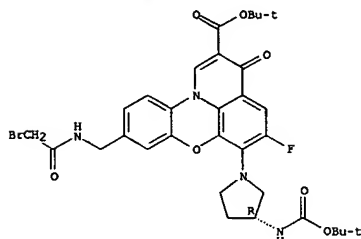
RN 216501-47-2 CAPLUS  
 CN 3H-Benzo[b]pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 5-fluoro-3-oxo-6-(1-piperazinyl)- (9CI) (CA INDEX NAME)

L4 ANSWER 14 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



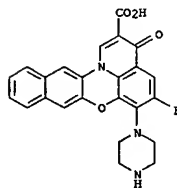
RN 237425-28-4 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 9-[[[(bromoacetyl)amino]methyl]-6-[(3R)-3-[[[(1,1-dimethylethoxy)carbonyl]amino]-1-pyrrolidinyl]-5-fluoro-3-oxo-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 216501-43-8P 216501-45-0P 216501-47-2P  
 237424-87-2P 237424-89-4P 237424-91-8P  
 237424-93-0P 237424-95-2P 237424-97-4P  
 237424-99-6P 237425-00-2P 237425-01-3P  
 237425-02-4P 237425-03-5P 237425-04-6P  
 237425-06-8P 237425-07-9P 237425-08-0P  
 237425-09-1P 237425-10-4P 237425-11-5P  
 237425-13-7P

L4 ANSWER 14 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

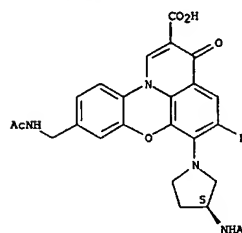


RN 237424-87-2 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 9-[(acetylamino)methyl]-6-[(3S)-3-(acetylamino)-1-pyrrolidinyl]-5-fluoro-3-oxo-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 237424-86-1  
 CMF C25 H23 F N4 O6

Absolute stereochemistry.



CM 2

CRN 76-05-1  
 CMF C2 H F3 O2



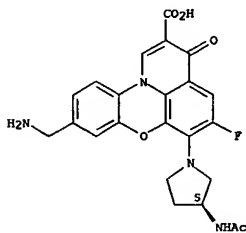
L4 ANSWER 14 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

RN 237424-89-4 CAPLUS  
 CN 3H-Pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid, 6-[(3S)-3-(acetylamino)-1-pyrrolidinyl]-9-(aminomethyl)-5-fluoro-3-oxo-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 237424-88-3  
 CMF C23 H21 F N4 O5

Absolute stereochemistry.



CM 2

CRN 76-05-1  
 CMF C2 H F3 O2

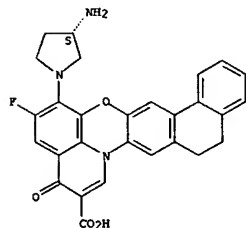


RN 237424-91-8 CAPLUS  
 CN 3H-Pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid, 6-[(3S)-3-(acetylamino)-1-pyrrolidinyl]-5-fluoro-3-oxo-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 237424-90-7  
 CMF C22 H18 F N3 O5

L4 ANSWER 14 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



CM 2

CRN 76-05-1  
 CMF C2 H F3 O2



RN 237424-95-2 CAPLUS  
 CN 10H-Naphtho[1,2-c]pyrido[3,2,1-kl]phenoxazine-9-carboxylic acid, 13-[(3S)-3-amino-1-pyrrolidinyl]-12-fluoro-15,16-dihydro-10-oxo-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

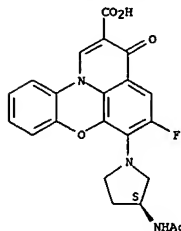
CM 1

CRN 237424-94-1  
 CMF C28 H22 F N3 O4

Absolute stereochemistry.

L4 ANSWER 14 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

Absolute stereochemistry.



CM 2

CRN 76-05-1  
 CMF C2 H F3 O2



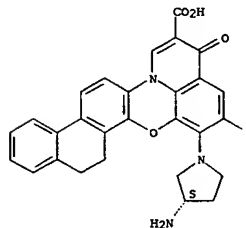
RN 237424-93-0 CAPLUS  
 CN 3H-Naphtho[2,1-b]pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid, 6-[(3S)-3-amino-1-pyrrolidinyl]-5-fluoro-13,14-dihydro-3-oxo-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 237424-92-9  
 CMF C28 H22 F N3 O4

Absolute stereochemistry.

L4 ANSWER 14 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



CM 2

CRN 76-05-1  
 CMF C2 H F3 O2



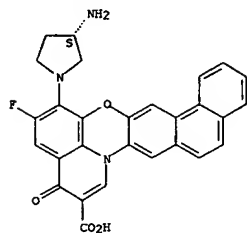
RN 237424-97-4 CAPLUS  
 CN 3H-Naphtho[2,1-b]pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid, 6-[(3S)-3-amino-1-pyrrolidinyl]-5-fluoro-3-oxo-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 237424-96-3  
 CMF C28 H20 F N3 O4

Absolute stereochemistry.

L4 ANSWER 14 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



CM 2

CRN 76-05-1

CMF C2 H F3 O2



RN 237424-99-6 CAPLUS  
 CN 10H-Naphtho[1,2-c]pyrido[3,2,1-k]phenoxazine-9-carboxylic acid,  
 13-[(3S)-3-amino-1-pyrrolidinyl]-12-fluoro-10-oxo-, mono(trifluoroacetate)  
 (9CI) (CA INDEX NAME)

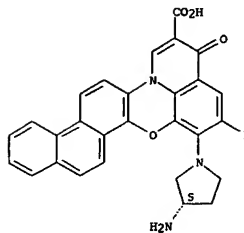
CM 1

CRN 237424-98-5

CMF C28 H20 F N3 O4

Absolute stereochemistry.

L4 ANSWER 14 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



CM 2

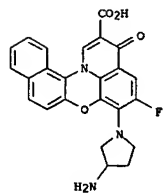
CRN 76-05-1

CMF C2 H F3 O2



RN 237425-00-2 CAPLUS  
 CN 3H-Benzo[a]pyrido[3,2,1-k]phenoxazine-2-carboxylic acid,  
 6-[(3R)-3-amino-1-pyrrolidinyl]-5-fluoro-3-oxo-, monohydrochloride (9CI) (CA  
 INDEX NAME)

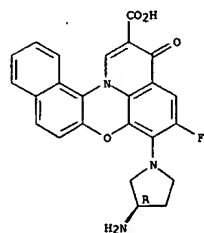
L4 ANSWER 14 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



● HCl

RN 237425-01-3 CAPLUS  
 CN 3H-Benzo[a]pyrido[3,2,1-k]phenoxazine-2-carboxylic acid,  
 6-[(3R)-3-amino-1-pyrrolidinyl]-5-fluoro-3-oxo-, monohydrochloride (9CI)  
 (CA INDEX NAME)

Absolute stereochemistry.

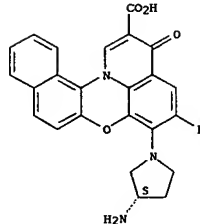


● HCl

RN 237425-02-4 CAPLUS  
 CN 3H-Benzo[a]pyrido[3,2,1-k]phenoxazine-2-carboxylic acid,  
 6-[(3S)-3-amino-1-pyrrolidinyl]-5-fluoro-3-oxo-, monohydrochloride (9CI)  
 (CA INDEX NAME)

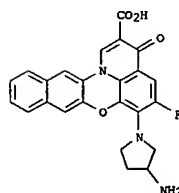
Absolute stereochemistry.

L4 ANSWER 14 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



● HCl

RN 237425-03-5 CAPLUS  
 CN 3H-Benzo[b]pyrido[3,2,1-k]phenoxazine-2-carboxylic acid,  
 6-[(3R)-3-amino-1-pyrrolidinyl]-5-fluoro-3-oxo-, monohydrochloride (9CI) (CA  
 INDEX NAME)



● HCl

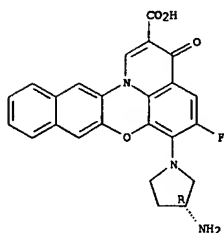
RN 237425-04-6 CAPLUS  
 CN 3H-Benzo[b]pyrido[3,2,1-k]phenoxazine-2-carboxylic acid,  
 6-[(3R)-3-amino-1-pyrrolidinyl]-5-fluoro-3-oxo-, monohydrochloride (9CI)  
 (CA INDEX NAME)

Absolute stereochemistry.

&lt;02/09/2006&gt;

Habte

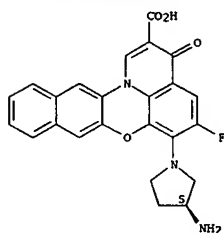
L4 ANSWER 14 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



● HCl

RN 237425-06-8 CAPLUS  
 CN 3H-Benzo[b]pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid,  
 6-[(3S)-3-amino-1-pyrrolidinyl]-5-fluoro-3-oxo-, monohydrochloride (9CI)  
 (CA INDEX NAME)

Absolute stereochemistry.

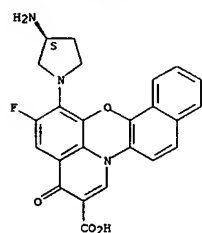


● HCl

RN 237425-07-9 CAPLUS  
 CN 3H-Benzo[c]pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid,  
 6-[(3R)-3-amino-1-pyrrolidinyl]-5-fluoro-3-oxo-, monohydrochloride (9CI) (CA

L4 ANSWER 14 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

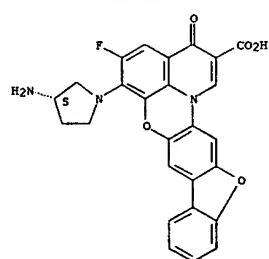
Absolute stereochemistry.



● HCl

RN 237425-10-4 CAPLUS  
 CN 3H-Benzofuro[2,3-b]pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid,  
 6-[(3S)-3-amino-1-pyrrolidinyl]-5-fluoro-3-oxo-, monohydrochloride (9CI)  
 (CA INDEX NAME)

Absolute stereochemistry.



● HCl

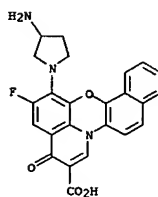
RN 237425-11-5 CAPLUS  
 CN 3H-Benzofuro[2,3-b]pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid,  
 6-[(3R)-3-amino-1-pyrrolidinyl]-5-fluoro-3-oxo-, monohydrochloride (9CI)  
 (CA INDEX NAME)

Absolute stereochemistry.

&lt;02/09/2006&gt;

Habte

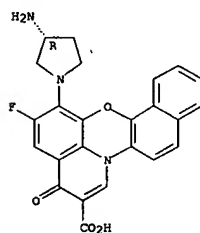
L4 ANSWER 14 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



● HCl

RN 237425-08-0 CAPLUS  
 CN 3H-Benzo[c]pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid,  
 6-[(3R)-3-amino-1-pyrrolidinyl]-5-fluoro-3-oxo-, monohydrochloride (9CI)  
 (CA INDEX NAME)

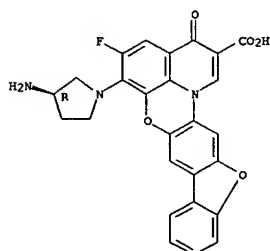
Absolute stereochemistry.



● HCl

RN 237425-09-1 CAPLUS  
 CN 3H-Benzo[c]pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid,  
 6-[(3S)-3-amino-1-pyrrolidinyl]-5-fluoro-3-oxo-, monohydrochloride (9CI)

L4 ANSWER 14 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



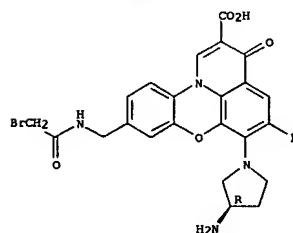
● HCl

RN 237425-13-7 CAPLUS  
 CN 3H-Pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid, 6-[(3R)-3-amino-1-pyrrolidinyl]-9-[[[trifluoroacetyl]amino]methyl]-5-fluoro-3-oxo-,  
 mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 237425-12-6  
 CMF C23 H20 Br F N4 O5

Absolute stereochemistry.



CM 2

CRN 76-05-1  
 CMF C2 H F3 O2

L4 ANSWER 14 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



IT 155035-57-7 216501-12-1 216501-27-8  
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 216501-35-8 216501-37-0 216501-39-2  
 216501-41-6

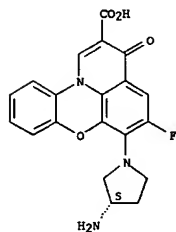
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(synthesis of quinobenzoxazine analogs with topoisomerase II and quadruplex interactions for use as antineoplastic agents)

RN 155035-57-7 CAPLUS

CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[(3S)-3-amino-1-pyrrolidinyl]-5-fluoro-3-oxo- (9CI) (CA INDEX NAME)

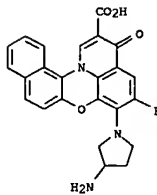
Absolute stereochemistry.



RN 216501-12-1 CAPLUS

CN 3H-Benzo[a]pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[(3S)-3-amino-1-pyrrolidinyl]-5-fluoro-3-oxo- (9CI) (CA INDEX NAME)

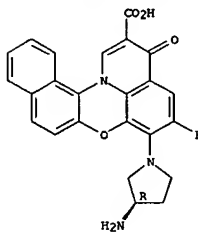
L4 ANSWER 14 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



RN 216501-27-8 CAPLUS

CN 3H-Benzo[a]pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[(3R)-3-amino-1-pyrrolidinyl]-5-fluoro-3-oxo- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

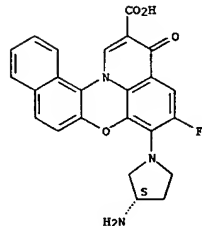


RN 216501-29-0 CAPLUS

CN 3H-Benzo[a]pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[(3S)-3-amino-1-pyrrolidinyl]-5-fluoro-3-oxo- (9CI) (CA INDEX NAME)

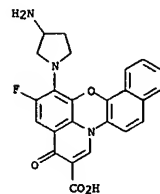
Absolute stereochemistry.

L4 ANSWER 14 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



RN 216501-31-4 CAPLUS

CN 3H-Benzo[c]pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[(3S)-3-amino-1-pyrrolidinyl]-5-fluoro-3-oxo- (9CI) (CA INDEX NAME)

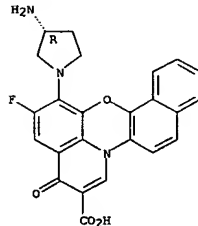


RN 216501-33-6 CAPLUS

CN 3H-Benzo[c]pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[(3R)-3-amino-1-pyrrolidinyl]-5-fluoro-3-oxo- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

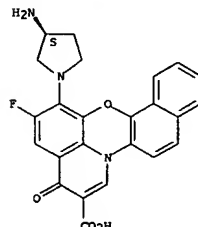
L4 ANSWER 14 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



RN 216501-35-8 CAPLUS

CN 3H-Benzo[c]pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[(3S)-3-amino-1-pyrrolidinyl]-5-fluoro-3-oxo- (9CI) (CA INDEX NAME)

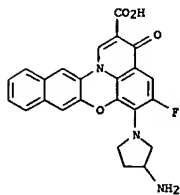
Absolute stereochemistry.



RN 216501-37-0 CAPLUS

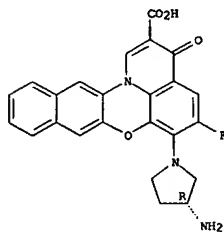
CN 3H-Benzo[b]pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[(3S)-3-amino-1-pyrrolidinyl]-5-fluoro-3-oxo- (9CI) (CA INDEX NAME)

L4 ANSWER 14 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



RN 216501-39-2 CAPLUS  
 CN 3H-Benzo[b]pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid,  
 6-[(3R)-3-amino-1-pyrrolidinyl]-5-fluoro-3-oxo- (9CI) (CA INDEX NAME)

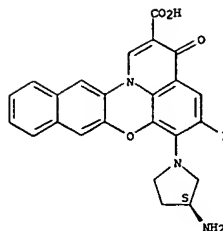
Absolute stereochemistry.



RN 216501-41-6 CAPLUS  
 CN 3H-Benzo[b]pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid,  
 6-[(3S)-3-amino-1-pyrrolidinyl]-5-fluoro-3-oxo- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

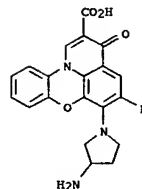
L4 ANSWER 14 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



L4 ANSWER 15 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1999:385800 CAPLUS  
 DOCUMENT NUMBER: 131:165080  
 TITLE: Structural insight into a quinolone-topoisomerase II-DNA complex.: Further evidence for a 2:2 quinobenzoxazine-Mg2+ self-assembly model formed in the presence of topoisomerase II  
 AUTHOR(S): Kwok, Yan; Zeng, Qingping; Hurley, Laurence H.  
 CORPORATE SOURCE: Drug Dynamics Institute, College of Pharmacy, University of Texas, Austin, TX, 78712-1074, USA  
 SOURCE: Journal of Biological Chemistry (1999), 274(24), 17226-17235  
 CODEN: JBCHA3; ISSN: 0021-9258  
 PUBLISHER: American Society for Biochemistry and Molecular Biology  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 AB Quinobenzoxazine A-62176, developed from the anti-bacterial fluorquinolones, is active in vitro and in vivo against murine and human tumors. It has been previously claimed that A-62176 is a catalytic inhibitor of mammalian topoisomerase II that does not stabilize the cleaved complex. However, at low drug concns. and pH 6-7, we have found that A-62176 can enhance the formation of the cleaved complex at certain sites. Using a photocleavage assay, mismatched sequences, and competition expts. between psorospermin and A-62176, we pinpointed the drug binding site on the DNA base pairs between positions +1 and +2 relative to the cleaved phosphodiester bonds. A 2:2 quinobenzoxazine-Mg2+ self-assembly model was previously proposed, in which one drug mol. intercalates into the DNA helix and the second drug mol. is externally bound, held to the first mol. and DNA by two Mg2+ bridges. The results of competition expts. between psorospermin and A-62176, as well as between psorospermin and A-62176 and norfloxacin, are consistent with this model and provide the first evidence that this 2:2 quinobenzoxazine-Mg2+ complex is assembled in the presence of topoisomerase II. These results also have parallel implications for the mode of binding of the quinolone antibiotics to the bacterial gyrase-DNA complex.  
 IT 111783-54-1, A-62176  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (Interaction of quinobenzoxazine A-62176 with topoisomerase II-DNA complex in study of mol. mechanism of antitumor activity)  
 RN 111783-54-1 CAPLUS  
 CN 3H-Pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid, 6-(3-amino-1-pyrrolidinyl)-5-fluoro-3-oxo-, monohydrochloride (9CI) (CA INDEX NAME)

L4 ANSWER 15 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



● HCl

REFERENCE COUNT: 31 THERE ARE 31 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 16 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 1998:636329 CAPLUS  
 DOCUMENT NUMBER: 130:20307  
 TITLE: Design of new topoisomerase II inhibitors based upon a quinobenzoxazine self-assembly model  
 AUTHOR(S): Zeng, Qingping; Kwok, Yan; Kerwin, Sean M.; Mangold, Gina; Hurley, Laurence H.  
 CORPORATE SOURCE: Drug Dynamics Institute and Division of Medicinal Chemistry College of Pharmacy, The University of Texas at Austin, Austin, TX, 78712-1074, USA  
 SOURCE: Journal of Medicinal Chemistry (1998), 41(22), 4273-4278  
 CODEN: JMCMAH; ISSN: 0022-2623  
 PUBLISHER: American Chemical Society  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English

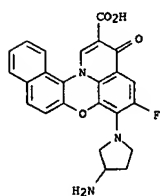
AB A new class of pyridobenzophenoxazines was developed as topoisomerase II inhibitors for anticancer chemotherapy. These compds. were designed based on a proposed model of a quinobenzoxazine self-assembly complex on DNA. They showed excellent inhibitory effects on several tumor cell lines with nanomolar IC50 values. Their cytotoxic potency correlates with their ability to unwind DNA and inhibit topoisomerase II.

IT 216501-12-1P 216501-27-8P 216501-29-0P  
 216501-31-4P 216501-33-6P 216501-35-8P  
 216501-37-0P 216501-39-2P 216501-41-6P  
 216501-43-8P 216501-45-0P 216501-47-2P

RL: ADV (Adverse effect, including toxicity); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PEP (Physical, engineering or chemical process); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); PROC (Process)

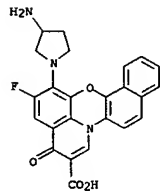
(cytotoxicity, topoisomerase II inhibition, and unwinding of DNA)

RN 216501-12-1 CAPLUS  
 CN 3H-Benzo[a]pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[(3R)-3-amino-1-pyrrolidinyl]-5-fluoro-3-oxo- (9CI) (CA INDEX NAME)



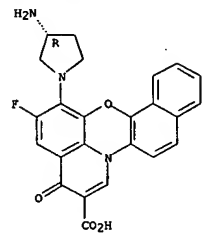
RN 216501-27-8 CAPLUS  
 CN 3H-Benzo[a]pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[(3R)-3-amino-1-pyrrolidinyl]-5-fluoro-3-oxo- (9CI) (CA INDEX NAME)

L4 ANSWER 16 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



RN 216501-33-6 CAPLUS  
 CN 3H-Benzo[c]pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[(3R)-3-amino-1-pyrrolidinyl]-5-fluoro-3-oxo- (9CI) (CA INDEX NAME)

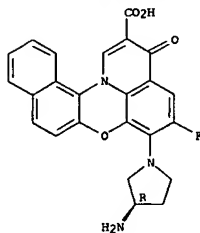
Absolute stereochemistry.



RN 216501-35-8 CAPLUS  
 CN 3H-Benzo[c]pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[(3S)-3-amino-1-pyrrolidinyl]-5-fluoro-3-oxo- (9CI) (CA INDEX NAME)

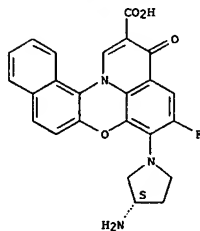
Absolute stereochemistry.

L4 ANSWER 16 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)  
 Absolute stereochemistry.



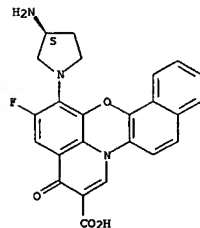
RN 216501-29-0 CAPLUS  
 CN 3H-Benzo[a]pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[(3S)-3-amino-1-pyrrolidinyl]-5-fluoro-3-oxo- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

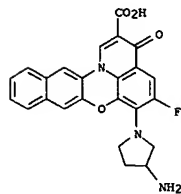


RN 216501-31-4 CAPLUS  
 CN 3H-Benzo[a]pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[(3S)-3-amino-1-pyrrolidinyl]-5-fluoro-3-oxo- (9CI) (CA INDEX NAME)

L4 ANSWER 16 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



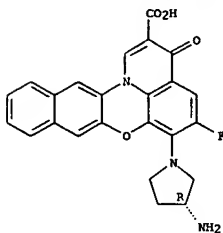
RN 216501-37-0 CAPLUS  
 CN 3H-Benzo[b]pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[(3R)-3-amino-1-pyrrolidinyl]-5-fluoro-3-oxo- (9CI) (CA INDEX NAME)



RN 216501-39-2 CAPLUS  
 CN 3H-Benzo[b]pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[(3R)-3-amino-1-pyrrolidinyl]-5-fluoro-3-oxo- (9CI) (CA INDEX NAME)

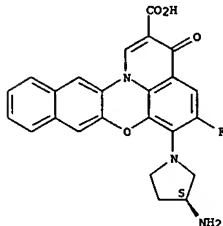
Absolute stereochemistry.

L4 ANSWER 16 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



RN 216501-41-6 CAPLUS  
 CN 3H-Benzo[b]pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid,  
 6-[(3S)-3-amino-1-pyrrolidinyl]-5-fluoro-3-oxo- (9CI) (CA INDEX NAME)

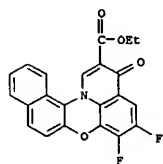
Absolute stereochemistry.



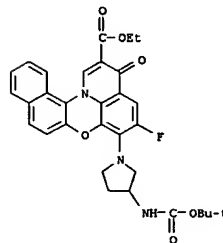
RN 216501-43-8 CAPLUS  
 CN 3H-Benzo[b]pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid,  
 5-fluoro-3-oxo-6-(1-piperazinyl)- (9CI) (CA INDEX NAME)

L4 ANSWER 16 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

IT 216501-08-5P 216501-10-9P 216501-18-7P  
 216501-20-1P 216501-22-3P 216501-24-5P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
 (Reactant or reagent)  
 (preparation of quinobenzoxazines as topoisomerase II inhibitors)  
 RN 216501-08-5 CAPLUS  
 CN 3H-Benzo[a]pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid,  
 5,6-difluoro-3-oxo-, ethyl ester (9CI) (CA INDEX NAME)

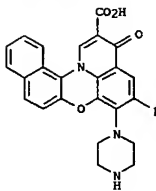


RN 216501-10-9 CAPLUS  
 CN 3H-Benzo[a]pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid,  
 6-[3-[[[(1,1-dimethylethoxy)carbonyl]amino]-1-pyrrolidinyl]-5-fluoro-3-oxo-  
 , ethyl ester (9CI) (CA INDEX NAME)

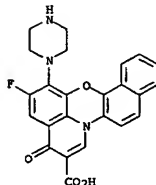


RN 216501-18-7 CAPLUS  
 CN 3H-Benzo[c]pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid,  
 5,6-difluoro-3-oxo-, ethyl ester (9CI) (CA INDEX NAME)

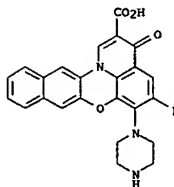
L4 ANSWER 16 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



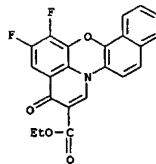
RN 216501-45-0 CAPLUS  
 CN 3H-Benzo[c]pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid,  
 5-fluoro-3-oxo-6-(1-piperazinyl)- (9CI) (CA INDEX NAME)



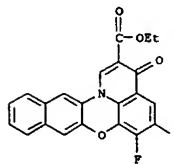
RN 216501-47-2 CAPLUS  
 CN 3H-Benzo[b]pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid,  
 5-fluoro-3-oxo-6-(1-piperazinyl)- (9CI) (CA INDEX NAME)



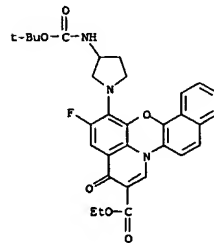
L4 ANSWER 16 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



RN 216501-20-1 CAPLUS  
 CN 3H-Benzo[b]pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid,  
 5,6-difluoro-3-oxo-, ethyl ester (9CI) (CA INDEX NAME)

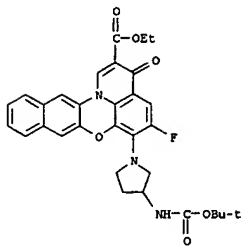


RN 216501-22-3 CAPLUS  
 CN 3H-Benzo[c]pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid,  
 6-[3-[[[(1,1-dimethylethoxy)carbonyl]amino]-1-pyrrolidinyl]-5-fluoro-3-oxo-  
 , ethyl ester (9CI) (CA INDEX NAME)





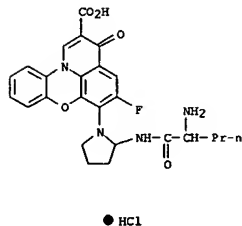
L4 ANSWER 16 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)  
 RN 216501-24-5 CAPLUS  
 CN 3H-Benzo[b]pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid,  
 6-([3-([1,1-dimethylethoxy)carbonyl]amino)-1-pyrrolidinyl]-5-fluoro-3-oxo-  
 , ethyl ester (9CI) (CA INDEX NAME)



REFERENCE COUNT: 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 17 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 1998:348417 CAPLUS  
 DOCUMENT NUMBER: 129:89796  
 TITLE: Bis(2,6-dioxopiperazines), catalytic inhibitors of DNA topoisomerase II, as molecular probes, cardioprotectors and antitumor drugs  
 AUTHOR(S): Andoh, T.  
 CORPORATE SOURCE: Department of Bioengineering, Faculty of Engineering, Soka University, Tokyo, 192, Japan  
 SOURCE: Biochimie (1998), 80(3), 235-246  
 CODEN: BICMBE; ISSN: 0300-9084  
 PUBLISHER: Editions Scientifiques et Medicales Elsevier  
 DOCUMENT TYPE: Journal: General Review  
 LANGUAGE: English  
 AB A review with 96 refs. Bis(2,6-dioxopiperazines) and other catalytic inhibitors of mammalian DNA topoisomerase II have recently been found in natural and synthetic compds. These compds. target the enzyme within the cell and inhibit various genetic processes involving the enzyme such as DNA replication and chromosome dynamics and thus proved to be good probes for the functional analyses of the enzyme in a variety of eukaryotes from yeast to mammals. Catalytic inhibitors were shown to be antagonists against topoisomerase II poisons under some conditions, but to be synergistic under others. Bis(2,6-dioxopiperazines) have a potential to overcome cardiac toxicity caused by potent antitumor anthracycline antibiotics such as doxorubicin and daunorubicin. ICRF-187, (+)-enantiomer of racemic ICRF-159, has been used in EU countries as cardioprotector in cancer clinics. Furthermore, bis(2,6-dioxopiperazines) enhance the efficacy of antitumor topoisomerase II poisons, e.g., anthracycline antibiotics such as daunorubicin and doxorubicin, by reducing their side effects and by allowing dose escalation of the antitumor drugs in preclin. and clin. settings. Besides bis(2,6-dioxopiperazines) per se having antitumor activity, and one of their derivs., MST-16 or sobuzoxane, bis(N1-isobutylloxycarbonyloxymethyl-2,6-dioxopiperazine), has been developed in Japan and used in clinics as anticancer drug for malignant lymphomas and adult T-cell leukemia (ATL). Further developments of bis(2,6-dioxopiperazines) as antimetastatic agents are expected.  
 IT 148201-60-9, A-74932  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (bis(2,6-dioxopiperazines), catalytic inhibitors of DNA topoisomerase II, as mol. probes, cardioprotectors and antitumor drugs)  
 RN 148201-60-9 CAPLUS  
 CN 3H-Pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid, 6-[2-[(2-amino-1-oxopentyl)amino]-1-pyrrolidinyl]-5-fluoro-3-oxo-, monohydrochloride (9CI) (CA INDEX NAME)

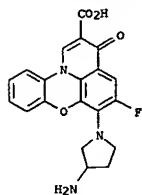
L4 ANSWER 17 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



REFERENCE COUNT: 96 THERE ARE 96 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

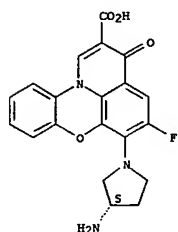
L4 ANSWER 18 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 1996:417993 CAPLUS  
 DOCUMENT NUMBER: 125:80570  
 TITLE: Evidence for the Formation of 2:2 Drug-Mg2+ Dimers in Solution and for the Formation of Dimeric Drug Complexes on DNA from the DNA-Accelerated Photochemical Reaction of Antineoplastic Quinobenzoxazines  
 AUTHOR(S): Yu, Hongtao; Hurlley, Laurence H.; Kervin, Sean M.  
 CORPORATE SOURCE: College of Pharmacy, University of Texas, Austin, TX, 78712-1074, USA  
 SOURCE: Journal of the American Chemical Society (1996), 118(30), 7040-7048  
 CODEN: JACSAT; ISSN: 0002-7863  
 PUBLISHER: American Chemical Society  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 AB The quinobenzoxazines are a group of topoisomerase II catalytic inhibitors that have demonstrated promising anticancer activity in mice. They have been proposed to form an unprecedented 2:2 drug-Mg2+ self-assembly complex on DNA. We have exploited the photochem. decomposition of the quinobenzoxazines to gain further support and insights into the nature of 2:2 quinobenzoxazine-Mg2+ dimers and the 2:2 drug-Mg2+ complex on duplex DNA. The quinobenzoxazine A-62176 undergoes photochem. to highly fluorescent products. Mg viologen (MV2+) accelerates this photoreaction almost 500-fold. The formation of 2:2 drug-Mg2+ dimers in solution is deduced from the Mg2+-dependent difference in the MV2+-facilitated photoreaction rates of racemic and scalemic A-62176. However, both racemic and scalemic A-62176 have identical MV2+-facilitated photoreaction rates in the presence of Mg2+ and the achiral fluoroquinolone Norfloxacin, due to heterochem. norfloxacin/A-62176 dimer complex formation. DNA also accelerates the photochem. decomposition of A-62176 up to 80-fold. This DNA-acceleration requires Mg2+, duplex DNA, mol. oxygen, and intercalation of the drug into the DNA duplex. In the proposed model for drug-DNA complexation, only one drug mol. of each 2:2 drug-Mg2+ dimer intercalates into the DNA duplex, the other mol. binds externally to the DNA. Norfloxacin, which can only play the external binding role, was able to modulate the photochem. reaction of the quinobenzoxazines on DNA. Furthermore, it appears that the precise positioning of the intercalated mol., which is modulated by the structure and stereochem. of the externally bound mol., plays an important role in determining the rate of photoreaction on DNA. The implications of the observed photochem. reaction of the quinobenzoxazines are described for human phototoxicity, photodynamic therapy, mechanism of action studies, and improved drug design for both topoisomerase and gyrase inhibitors.  
 IT 111783-55-2D, complexes with magnesium and DNA  
 155035-57-7D, complexes with magnesium and DNA  
 155035-58-8D, complexes with magnesium and DNA  
 RL: BPR (Biological process); BSU (Biological study, unclassified); MPM (Metabolic formation); BIOL (Biological study); FORM (Formation, nonpreparative); PROC (Process)  
 (use of the photochem. decomposition of antineoplastic quinobenzoxazines to gain insights into the nature of 2:2 quinobenzoxazine-Mg2+ dimers and the 2:2 drug-Mg2+ complex on duplex DNA)  
 RN 111783-55-2 CAPLUS  
 CN 3H-Pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid, 6-([3-amino-1-pyrrolidinyl]-5-fluoro-3-oxo- (9CI) (CA INDEX NAME)

L4 ANSWER 18 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



RN 155035-57-7 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[(3S)-3-amino-1-pyrrolidinyl]-5-fluoro-3-oxo- (9CI) (CA INDEX NAME)

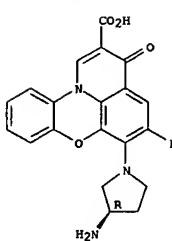
Absolute stereochemistry.



RN 155035-58-8 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[(3R)-3-amino-1-pyrrolidinyl]-5-fluoro-3-oxo- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

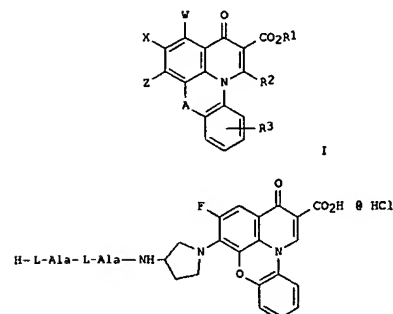
L4 ANSWER 18 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



L4 ANSWER 19 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 1995:394717 CAPLUS  
 DOCUMENT NUMBER: 122:160653  
 TITLE: Quinolinobenzoxazine, antineoplastic agents  
 INVENTOR(S): Chu, Daniel T.; Plattner, Jacob J.; Hallas, Robert  
 PATENT ASSIGNEE(S): Abbott Laboratories, USA  
 SOURCE: U.S., 31 pp. Cont. of U.S. Ser. No. 573,102, abandoned  
 CODEN: USXXAM  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 3  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5318965	A	19940607	US 1982-842910	19920227
CA 2099609	AA	19920225	CA 1991-2099609	19910823
WO 9316702	A1	19930902	WO 1993-US1766	19930226
W: AU, CA, JP, KR				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
AU 9337803	A1	19930913	AU 1993-37803	19930226
JP 07500611	T2	19950119	JP 1993-515097	19930226
JP 2578576	B2	19970205		
US 5624924	A	19970429	US 1994-254801	19940606
PRIORITY APPL. INFO.:			US 1990-573102	B2 19900824
			US 1992-842910	A 19920227
			WO 1993-US1766	A 19930226

OTHER SOURCE(S): MARPAT 122:160653  
 GI



II

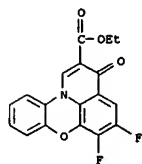
AB Quinolinobenzoxazine derivs. of the formula I as well as the

&lt;02/09/2006&gt;

Habte

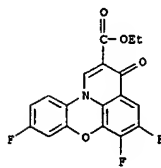
L4 ANSWER 19 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)  
 pharmaceutically acceptable salts, esters, amides and prodrugs thereof are disclosed, wherein R1 is hydrogen or a carboxy-protecting group, R2 and R3 are substituents, A is oxygen, Z is a halogen or a nitro-gen-contg. group, X is hydrogen, halogen or alkyl, and W is hydrogen, alkyl, amino or halogen. Antineoplastic activity of title compd. II (prepn. given) against solid tumors implanted in mice was measured as mean lifespan comparison value, or mean survival time (test/control) [MST(T/C)]: 215% at 12.5 mg/kg. Pharmaceutical compns. are given.  
 IT 100828-10-2P, Ethyl 1,2-difluoro-4-oxo-4H-quinolino[2,3,4-i,j][1,4]benzoxazine-5-carboxylate 110943-87-8P, Ethyl 1,2,9-trifluoro-4-H-quinolo[2,3,4-i,j][1,4]benzoxazine-5-carboxylate 142136-68-3P, Ethyl 1,2-difluoro-8-methyl-4-oxo-4H-quinolino[2,3,4-i,j][1,4]benzoxazine-5-carboxylate 142136-69-4P, Ethyl 1-(3-acetamidopyrrolidin-1-yl)-2-fluoro-8-methyl-4-oxo-4H-quinolino[2,3,4-i,j][1,4]benzoxazine-5-carboxylate 142136-72-8P, 1-[3-[(N-tert-Butyloxycarbonyl)amino]pyrrolidin-1-yl]-2-fluoro-4-oxo-4H-quinolino[2,3,4-i,j][1,4]benzoxazine-5-carboxylic acid 142136-73-0P, 1-[3-[(N-tert-Butoxycarbonyl)amino]pyrrolidin-1-yl]-2-fluoro-8-methyl-4-oxo-4H-quinolino[2,3,4-i,j][1,4]benzoxazine-5-carboxylic acid 142136-74-1P, 1-[3-[(N-tert-Butoxycarbonyl)amino]pyrrolidin-1-yl]-2-fluoro-8-methyl-4-oxo-4H-quinolino[2,3,4-i,j][1,4]benzoxazine-5-carboxylic acid 142136-82-1P, Ethyl 1-[(3R)-3-(N-tert-butoxycarbonyl)amino]pyrrolidin-1-yl]-2-fluoro-4-oxo-4H-quinolino[2,3,4-i,j][1,4]benzoxazine-5-carboxylate 142136-92-3P, Ethyl 1-(3-acetamidopyrrolidin-1-yl)-2,3-difluoro-4-oxo-4H-quinolino[2,3,4-i,j][1,4]benzoxazine-5-carboxylate 142136-93-4P, 1-[3-[(N-tert-butoxycarbonyl)amino]pyrrolidin-1-yl]-2,3-difluoro-4-oxo-4H-quinolino[2,3,4-i,j][1,4]benzoxazine-5-carboxylic acid 142136-94-5P, 1-[(3R)-3-(N-tert-butoxycarbonyl)amino]pyrrolidin-1-yl]-2-fluoro-4-oxo-4H-quinolino[2,3,4-i,j][1,4]benzoxazine-5-carboxylic acid 142136-95-6P, 1-[(3S)-3-(N-tert-butoxycarbonyl)amino]pyrrolidin-1-yl]-2-fluoro-4-oxo-4H-quinolino[2,3,4-i,j][1,4]benzoxazine-5-carboxylic acid 155035-40-8P, Ethyl 1,2-difluoro-9-methyl-4-oxo-4H-quinolino[2,3,4-i,j][1,4]benzoxazine-5-carboxylate 155035-41-9P, Ethyl 1-(3-acetamidopyrrolidin-1-yl)-2-fluoro-9-methyl-4-oxo-4H-quinolino[2,3,4-i,j][1,4]benzoxazine-5-carboxylate 155035-43-1P, Ethyl 1-(3-acetamidopyrrolidin-1-yl)-2,9-difluoro-4-oxo-4H-quinolino[2,3,4-i,j][1,4]benzoxazine-5-carboxylate 155035-47-5P, 1-[3-[(N-tert-Butyloxycarbonyl)amino]pyrrolidin-1-yl]-2-fluoro-9-methyl-4-oxo-4H-quinolino[2,3,4-i,j][1,4]benzoxazine-5-carboxylic acid 155035-51-1P, 1-[3-[(N-tert-Butyloxycarbonyl)amino]pyrrolidin-1-yl]-2-fluoro-9-methyl-4-oxo-4H-quinolino[2,3,4-i,j][1,4]benzoxazine-5-carboxylic acid 155035-54-4P, Ethyl 1,2-difluoro-8,10-dimethyl-4-oxo-4H-quinolino[2,3,4-i,j][1,4]benzoxazine-5-carboxylate 155035-55-5P, 1,2-Difluoro-8,10-dimethyl-4-oxo-4H-quinolino[2,3,4-i,j][1,4]benzoxazine-5-carboxylic acid 155035-56-6P, 1-[3-(N-tert-Butoxycarbonyl)amino]pyrrolidin-1-yl]-8,10-dimethyl-2-fluoro-4-oxo-4H-quinolino[2,3,4-i,j][1,4]benzoxazine-5-carboxylic acid 155035-61-3P, Ethyl 1-[(3S)-3-(N-tert-butoxycarbonyl)amino]pyrrolidin-1-yl]-2-fluoro-9-methyl-4-oxo-4H-quinolino[2,3,4-i,j][1,4]benzoxazine-5-carboxylate 155035-64-6P, Ethyl 1-[(3R)-3-(N-tert-butoxycarbonyl)amino]pyrrolidin-1-yl]-2-fluoro-9-methyl-4-oxo-4H-quinolino[2,3,4-i,j][1,4]benzoxazine-5-carboxylate 155035-67-9P, Ethyl 8-tert-butyl-1,2-difluoro-4-oxo-4H-quinolino[2,3,4-i,j][1,4]benzoxazine-5-carboxylate 155035-68-0P, 155035-70-2P, 1-[(3R)-3-(N-tert-butoxycarbonyl)amino]pyrrolidin-1-yl]-2-fluoro-9-methyl-4-oxo-4H-quinolino[2,3,4-

L4 ANSWER 19 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)  
 i,j)[1,4]benzoxazine-5-carboxylic acid 155035-82-8P, Ethyl 1-[3-(tert-butyloxycarbonylamino)pyrrolidin-1-yl]-8-ethylsulfonyl-2-fluoro-4-oxo-4H-quinolino[2,3,4-i,j][1,4]benzoxazine-5-carboxylate 155035-85-1P, 1-[3-[(N-tert-butyloxycarbonylnorvalyl)amino]pyrrolidin-1-yl]-2-fluoro-8-ethylsulfonyl-4-oxo-4H-quinolino[2,3,4-i,j][1,4]benzoxazine-5-carboxylic acid 155035-89-5P, 1-[(2S,4S)-4-Tert-butyloxycarbonylamino-2-methylpyrrolidin-1-yl]-8,10-dimethyl-2-fluoro-4-oxo-4H-quinolino[2,3,4-i,j][1,4]benzoxazine-5-carboxylic acid 155035-92-0P, Ethyl 1,2-difluoro-8,9-methylenedioxy-4-oxo-4H-quinolino[2,3,4-i,j][1,4]benzoxazine-5-carboxylate 155035-93-1P, Ethyl 1-[3-(tert-butyloxycarbonylamino)pyrrolidin-1-yl]-2-fluoro-8,9-methylenedioxy-4-oxo-4H-quinolino[2,3,4-i,j][1,4]benzoxazine-5-carboxylate 155036-01-4P, Ethyl 1-[3-(acetamidopyrrolidin-1-yl)-3-acetamido-2-fluoro-4-oxo-4H-quinolino[2,3,4-i,j][1,4]benzoxazine-5-carboxylate 155036-03-6P, 1-[3-[(tert-butyloxycarbonylalanyl)amino]pyrrolidin-1-yl]-2-fluoro-4-oxo-4H-quinolino[2,3,4-i,j][1,4]benzoxazine-5-carboxylic acid 155036-04-7P, 1-(3-Alanylaminopyrrolidin-1-yl)-2-fluoro-4-oxo-4H-quinolino[2,3,4-i,j][1,4]benzoxazine-5-carboxylic acid hydrochloride 155036-05-8P, 1-[3-[(tert-butyloxycarbonylalanyl)amino]pyrrolidin-1-yl]-2-fluoro-4-oxo-4H-quinolino[2,3,4-i,j][1,4]benzoxazine-5-carboxylic acid 155036-07-0P, 1-[3-[(tert-butyloxycarbonylnorvalyl)norvalyl]amino]pyrrolidin-1-yl]-2-fluoro-4-oxo-4H-quinolino[2,3,4-i,j][1,4]benzoxazine-5-carboxylic acid 155036-10-5P, 1-[3-[(tert-butyloxycarbonylalanyl)norvalyl]amino]pyrrolidin-1-yl]-2-fluoro-4-oxo-4H-quinolino[2,3,4-i,j][1,4]benzoxazine-5-carboxylic acid 155036-13-8P, 1-[3-[(tert-butyloxycarbonylnorvalyl)alanyl]amino]pyrrolidin-1-yl]-2-fluoro-4-oxo-4H-quinolino[2,3,4-i,j][1,4]benzoxazine-5-carboxylic acid 161311-43-9P, Ethyl 1,2-difluoro-8-ethylsulfonyl-4-oxo-4H-quinolino[2,3,4-i,j][1,4]benzoxazine-5-carboxylate  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (prepn. and reaction of, in prepn. of antineoplastic agent)  
 RN 100828-10-2 CAPLUS  
 CN 3H-Pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid, 5,6-difluoro-3-oxo-, ethyl ester (9CI) (CA INDEX NAME)

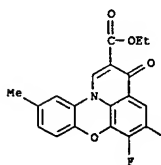


RN 110943-87-8 CAPLUS  
 CN 3H-Pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid, 5,6,9-trifluoro-3-oxo-, ethyl ester (9CI) (CA INDEX NAME)

L4 ANSWER 19 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)  
 ethyl ester (9CI) (CA INDEX NAME)

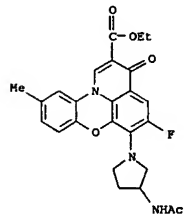


RN 142136-68-3 CAPLUS  
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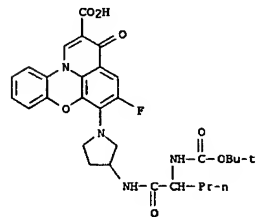


RN 142136-69-4 CAPLUS  
 CN 3H-Pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid, 6-[3-(acetylamino)-1-pyrrolidinyl]-5-fluoro-10-methyl-3-oxo-, ethyl ester (9CI) (CA INDEX NAME)

L4 ANSWER 19 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

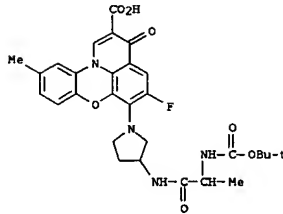


RN 142136-72-9 CAPLUS  
 CN 3H-Pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid, 6-[3-[[2-[[[(1,1-dimethylethoxy)carbonyl]amino]-1-oxopentyl]amino]-1-pyrrolidinyl]-5-fluoro-3-oxo- (9CI) (CA INDEX NAME)

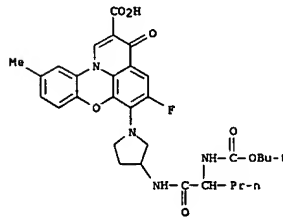


RN 142136-73-0 CAPLUS  
 CN 3H-Pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid, 6-[3-[[2-[[[(1,1-dimethylethoxy)carbonyl]amino]-1-oxopropyl]amino]-1-pyrrolidinyl]-5-fluoro-10-methyl-3-oxo- (9CI) (CA INDEX NAME)

L4 ANSWER 19 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



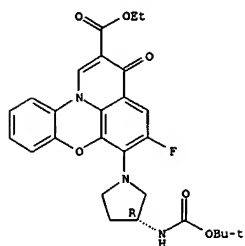
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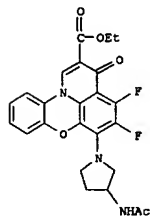
RN 142136-82-1 CAPLUS  
 CN 3H-Pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid, 6-[3-[[2-[[[(1,1-dimethylethoxy)carbonyl]amino]-1-pyrrolidinyl]-5-fluoro-3-oxo-, ethyl ester, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L4 ANSWER 19 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

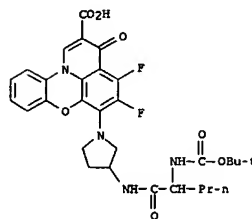


RN 142136-92-3 CAPLUS  
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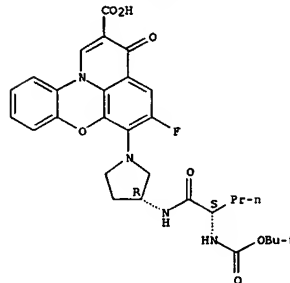
RN 142136-93-4 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[3-[[2-[[[(1,1-dimethylethoxy)carbonyl]amino]-1-oxopentyl]amino]-1-pyrrolidinyl]-4,5-difluoro-3-oxo- (9CI) (CA INDEX NAME)

L4 ANSWER 19 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



RN 142136-94-5 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[3-[[2-[[[(1,1-dimethylethoxy)carbonyl]amino]-1-oxopentyl]amino]-1-pyrrolidinyl]-5-fluoro-3-oxo-, [S-(R\*,S\*)]- (9CI) (CA INDEX NAME)

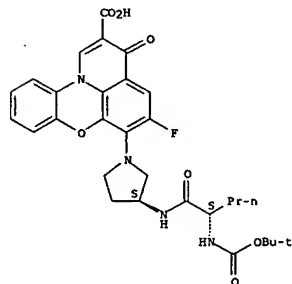
Absolute stereochemistry.



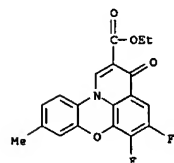
RN 142136-95-6 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[3-[[2-[[[(1,1-dimethylethoxy)carbonyl]amino]-1-oxopentyl]amino]-1-pyrrolidinyl]-5-fluoro-3-oxo-, [S-(R\*,R\*)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L4 ANSWER 19 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

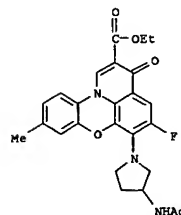


RN 155035-40-8 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 5,6-difluoro-9-methyl-3-oxo-, ethyl ester (9CI) (CA INDEX NAME)

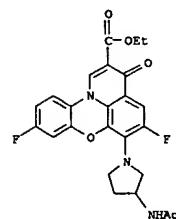


RN 155035-41-9 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[3-(acetamino)-1-pyrrolidinyl]-5-fluoro-9-methyl-3-oxo-, ethyl ester (9CI) (CA INDEX NAME)

L4 ANSWER 19 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

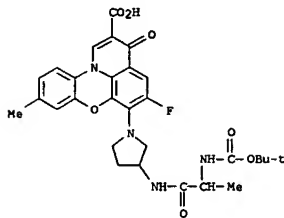


RN 155035-43-1 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[3-(acetamino)-1-pyrrolidinyl]-5,9-difluoro-3-oxo-, ethyl ester (9CI) (CA INDEX NAME)



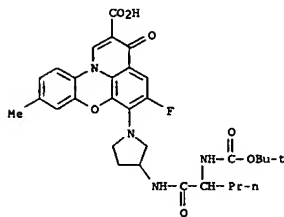
RN 155035-47-5 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[3-[[2-[[[(1,1-dimethylethoxy)carbonyl]amino]-1-oxopropyl]amino]-1-pyrrolidinyl]-5-fluoro-9-methyl-3-oxo- (9CI) (CA INDEX NAME)

L4 ANSWER 19 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



RN 155035-51-1 CAPLUS

CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[3-[[[1,1-dimethylethoxy]carbonyl]amino]-1-oxopentyl]amino]-5-fluoro-9-methyl-3-oxo- (9CI) (CA INDEX NAME)



RN 155035-54-4 CAPLUS

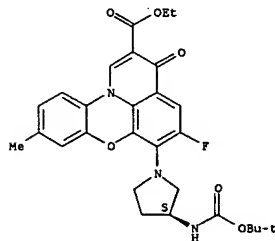
CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 5,6-difluoro-8,10-dimethyl-3-oxo-, ethyl ester (9CI) (CA INDEX NAME)

L4 ANSWER 19 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

RN 155035-61-3 CAPLUS

CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[3-[[[1,1-dimethylethoxy]carbonyl]amino]-1-pyrrolidinyl]-5-fluoro-9-methyl-3-oxo-, ethyl ester, (S)- (9CI) (CA INDEX NAME)

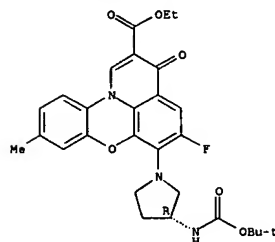
Absolute stereochemistry.



RN 155035-64-6 CAPLUS

CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[3-[[[1,1-dimethylethoxy]carbonyl]amino]-1-pyrrolidinyl]-10-(1,1-dimethylethyl)-5-fluoro-9-methyl-3-oxo-, ethyl ester, (R)- (9CI) (CA INDEX NAME)

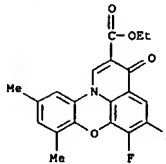
Absolute stereochemistry.



RN 155035-67-9 CAPLUS

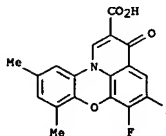
CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 10-(1,1-dimethylethyl)-5,6-difluoro-3-oxo-, ethyl ester (9CI) (CA INDEX NAME)

L4 ANSWER 19 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



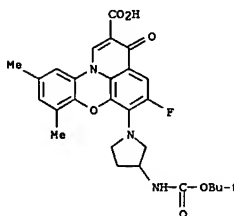
RN 155035-55-5 CAPLUS

CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 5,6-difluoro-8,10-dimethyl-3-oxo- (9CI) (CA INDEX NAME)

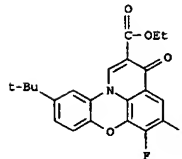


RN 155035-56-6 CAPLUS

CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[3-[[[1,1-dimethylethoxy]carbonyl]amino]-1-pyrrolidinyl]-5-fluoro-8,10-dimethyl-3-oxo- (9CI) (CA INDEX NAME)

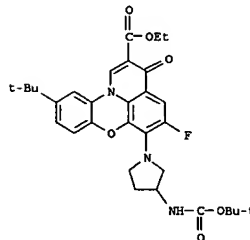


L4 ANSWER 19 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



RN 155035-68-0 CAPLUS

CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[3-[[[1,1-dimethylethoxy]carbonyl]amino]-1-pyrrolidinyl]-10-(1,1-dimethylethyl)-5-fluoro-3-oxo-, ethyl ester (9CI) (CA INDEX NAME)

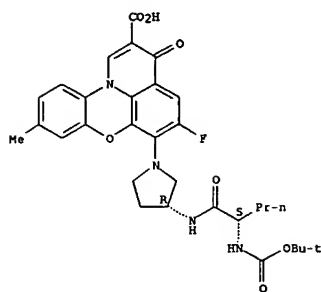


RN 155035-70-2 CAPLUS

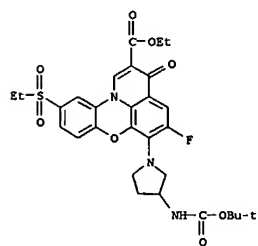
CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[3-[[[1,1-dimethylethoxy]carbonyl]amino]-1-oxopentyl]amino]-1-pyrrolidinyl]-5-fluoro-9-methyl-3-oxo-, {5-(R\*,S\*)}- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L4 ANSWER 19 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

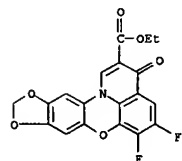


RN 155035-82-8 CAPLUS  
CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[3-[[[(1,1-dimethylethoxy)carbonyl]amino]-1-pyrrolidinyl]-10-(ethylsulfonyl)-5-fluoro-3-oxo-, ethyl ester (9CI) (CA INDEX NAME)

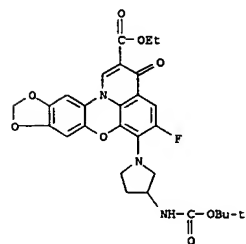


RN 155035-85-1 CAPLUS  
CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[3-[[2-[[[(1,1-dimethylethoxy)carbonyl]amino]-1-oxopentyl]amino]-1-pyrrolidinyl]-10-(ethylsulfonyl)-5-fluoro-3-oxo-, ethyl ester (9CI) (CA INDEX NAME)

L4 ANSWER 19 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

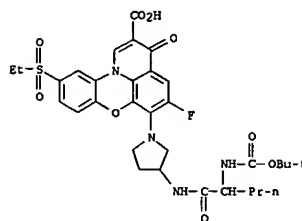


RN 155035-93-1 CAPLUS  
CN 3H-[1,3]Dioxolo[4,5-b]pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[3-[[[(1,1-dimethylethoxy)carbonyl]amino]-1-pyrrolidinyl]-5-fluoro-3-oxo-, ethyl ester (9CI) (CA INDEX NAME)



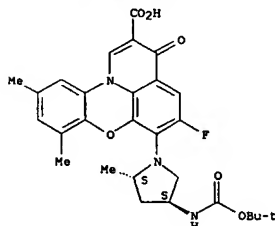
RN 155036-01-4 CAPLUS  
CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 4-(acetylamino)-6-[3-(acetylamino)-1-pyrrolidinyl]-5-fluoro-3-oxo-, ethyl ester (9CI) (CA INDEX NAME)

L4 ANSWER 19 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



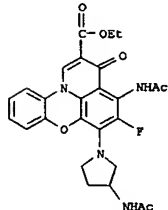
RN 155035-89-5 CAPLUS  
CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[4-[[[(1,1-dimethylethoxy)carbonyl]amino]-2-methyl-1-pyrrolidinyl]-5-fluoro-8,10-dimethyl-3-oxo-, (3S-trans)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

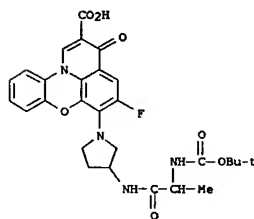


RN 155035-92-0 CAPLUS  
CN 3H-[1,3]Dioxolo[4,5-b]pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 5,6-difluoro-3-oxo-, ethyl ester (9CI) (CA INDEX NAME)

L4 ANSWER 19 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

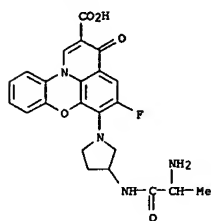


RN 155036-03-6 CAPLUS  
CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[3-[[2-[[[(1,1-dimethylethoxy)carbonyl]amino]-1-oxopropyl]amino]-1-pyrrolidinyl]-5-fluoro-3-oxo-, ethyl ester (9CI) (CA INDEX NAME)



RN 155036-04-7 CAPLUS  
CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[3-[[2-amino-1-oxopropyl]amino]-1-pyrrolidinyl]-5-fluoro-3-oxo-, monohydrochloride (9CI) (CA INDEX NAME)

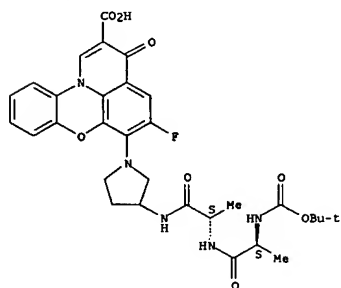
L4 ANSWER 19 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



● HCl

RN 155036-05-8 CAPLUS  
 CN L-Alaninamide, N-[(1,1-dimethylethoxy)carbonyl]-L-alanyl-N-[1-(2-carboxy-5-fluoro-3-oxo-3H-pyrido[3,2,1-k]phenoxazin-6-yl)-3-pyrrolidinyl]- (9CI)  
 (CA INDEX NAME)

Absolute stereochemistry.

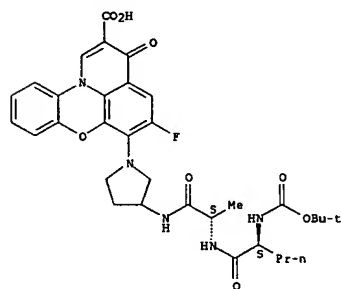


RN 155036-07-0 CAPLUS  
 CN L-Norvalinamide, N-[(1,1-dimethylethoxy)carbonyl]-L-norvalyl-N-[1-(2-carboxy-5-fluoro-3-oxo-3H-pyrido[3,2,1-k]phenoxazin-6-yl)-3-pyrrolidinyl]- (9CI)  
 (CA INDEX NAME)

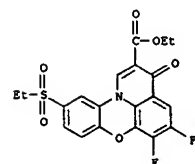
L4 ANSWER 19 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

RN 155036-13-8 CAPLUS  
 CN L-Alaninamide, N-[(1,1-dimethylethoxy)carbonyl]-L-norvalyl-N-[1-(2-carboxy-5-fluoro-3-oxo-3H-pyrido[3,2,1-k]phenoxazin-6-yl)-3-pyrrolidinyl]- (9CI)  
 (CA INDEX NAME)

Absolute stereochemistry.



RN 161311-43-9 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 10-(ethylsulfonfyl)-5,6-difluoro-3-oxo-, ethyl ester (9CI) (CA INDEX NAME)



IT 142247-43-6P, 1-(3-Aminopyrrolidin-1-yl)-2-fluoro-8-methyl-4-oxo-4H-quinolino[2,3,4-i,j][1,4]benzoxazine-5-carboxylic acid hydrochloride  
 RL: RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use);  
 BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent);  
 USES (Uses)  
 (preparation as antineoplastic agent)

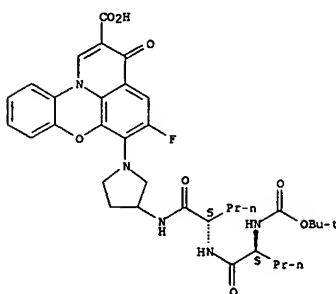
RN 142247-43-6 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-(3-amino-1-pyrrolidinyl)-5-fluoro-10-trimethyl-3-oxo-, monohydrochloride (9CI) (CA INDEX NAME)

&lt;02/09/2006&gt;

Habte

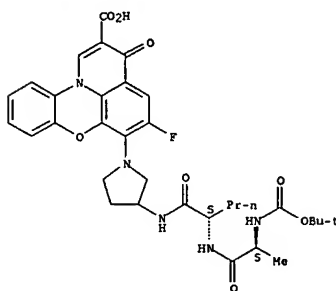
L4 ANSWER 19 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

Absolute stereochemistry.

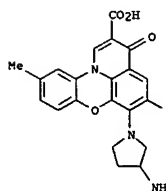


RN 155036-10-5 CAPLUS  
 CN L-Norvalinamide, N-[(1,1-dimethylethoxy)carbonyl]-L-alanyl-N-[1-(2-carboxy-5-fluoro-3-oxo-3H-pyrido[3,2,1-k]phenoxazin-6-yl)-3-pyrrolidinyl]- (9CI)  
 (CA INDEX NAME)

Absolute stereochemistry.



L4 ANSWER 19 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

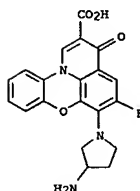


● HCl

IT 111783-55-2P, 1-(3-Aminopyrrolidin-1-yl)-2-fluoro-4-oxo-4H-quinolino[2,3,4-i,j][1,4]benzoxazine-5-carboxylic acid  
 142136-44-5P, 1-(3-Norvalylaminopyrrolidin-1-yl)-2-fluoro-4-oxo-4H-quinolino[2,3,4-i,j][1,4]benzoxazine-5-carboxylic acid  
 142136-45-6P, 1-(3-Alanylaminopyrrolidin-1-yl)-2-fluoro-4-oxo-4H-quinolino[2,3,4-i,j][1,4]benzoxazine-5-carboxylic acid  
 142136-48-9P, 1-(3-Aminopyrrolidin-1-yl)-2-fluoro-8-methyl-4-oxo-4H-quinolino[2,3,4-i,j][1,4]benzoxazine-5-carboxylic acid  
 142136-49-0P, 1-(3-Norvalylaminopyrrolidin-1-yl)-2-fluoro-8-methyl-4-oxo-4H-quinolino[2,3,4-i,j][1,4]benzoxazine-5-carboxylic acid  
 142136-50-3P, 1-(3-Alanylaminopyrrolidin-1-yl)-2-fluoro-8-methyl-4-oxo-4H-quinolino[2,3,4-i,j][1,4]benzoxazine-5-carboxylic acid  
 142247-45-8P, 1-(3-Alanylaminopyrrolidin-1-yl)-2-fluoro-8-methyl-4-oxo-4H-quinolino[2,3,4-i,j][1,4]benzoxazine-5-carboxylic acid hydrochloride  
 142247-46-9P, 1-(3-Norvalylaminopyrrolidin-1-yl)-2-fluoro-8-methyl-4-oxo-4H-quinolino[2,3,4-i,j][1,4]benzoxazine-5-carboxylic acid hydrochloride  
 142247-49-2P, 1-[(3S)-3-Aminopyrrolidin-1-yl]-2-fluoro-4-oxo-4H-quinolino[2,3,4-i,j][1,4]benzoxazine-5-carboxylic acid hydrochloride  
 142247-50-5P, 1-[(3R)-3-Aminopyrrolidin-1-yl]-2-fluoro-4-oxo-4H-quinolino[2,3,4-i,j][1,4]benzoxazine-5-carboxylic acid hydrochloride  
 142247-53-0P, 1-(3-Aminopyrrolidin-1-yl)-2,3-difluoro-4-oxo-4H-quinolino[2,3,4-i,j][1,4]benzoxazine-5-carboxylic acid hydrochloride  
 142247-56-1P, 2,3-Difluoro-1-(3-norvalylaminopyrrolidin-1-yl)-4-oxo-4H-quinolino[2,3,4-i,j][1,4]benzoxazine-5-carboxylic acid hydrochloride  
 155035-38-4P, Ethyl 1-(3-acetamidopyrrolidin-1-yl)-2-fluoro-9-nitro-4-oxo-4H-quinolino[2,3,4-i,j][1,4]benzoxazine-5-carboxylate  
 155035-39-5P, 1-(3-Aminopyrrolidin-1-yl)-2-fluoro-9-methyl-4-oxo-4H-quinolino[2,3,4-i,j][1,4]benzoxazine-5-carboxylic acid  
 155035-42-0P, 1-(3-Aminopyrrolidin-1-yl)-2,9-difluoro-4-oxo-4H-quinolino[2,3,4-i,j][1,4]benzoxazine-5-carboxylic acid hydrochloride  
 155035-44-2P, 1-(3-Norvalylaminopyrrolidin-1-yl)-2-fluoro-4-oxo-4H-quinolino[2,3,4-i,j][1,4]benzoxazine-5-carboxylic acid hydrochloride  
 155035-45-3P, 1-(3-Alanylaminopyrrolidin-1-yl)-2-fluoro-9-methyl-4-oxo-4H-quinolino[2,3,4-i,j][1,4]benzoxazine-5-carboxylic acid hydrochloride  
 155035-46-4P, 1-(3-Alanylaminopyrrolidin-1-yl)-2-fluoro-9-methyl-4-oxo-4H-quinolino[2,3,4-i,j][1,4]benzoxazine-5-carboxylic acid

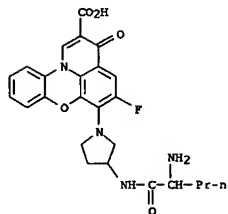
L4 ANSWER 19 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)  
 155035-48-6P, 1-(3-Aminopyrrolidin-1-yl)-2-fluoro-9-methyl-4-oxo-4H-quinolino[2,3,4-i,j][1,4]benzoxazine-5-carboxylic acid hydrochloride  
 155035-49-7P, 1-(3-Norvalylaminopyrrolidin-1-yl)-2-fluoro-9-methyl-4-oxo-4H-quinolino[2,3,4-i,j][1,4]benzoxazine-5-carboxylic acid hydrochloride  
 155035-50-0P, 1-(3-Norvalylaminopyrrolidin-1-yl)-2-fluoro-9-methyl-4-oxo-4H-quinolino[2,3,4-i,j][1,4]benzoxazine-5-carboxylic acid  
 155035-52-2P, 1-(3-Aminopyrrolidin-1-yl)-8,10-dimethyl-2-fluoro-4-oxo-4H-quinolino[2,3,4-i,j][1,4]benzoxazine-5-carboxylic acid hydrochloride  
 155035-53-3P, 1-(3-Aminopyrrolidin-1-yl)-8,10-dimethyl-2-fluoro-4-oxo-4H-quinolino[2,3,4-i,j][1,4]benzoxazine-5-carboxylic acid  
 155035-57-7P, 1-[(3S)-3-Aminopyrrolidin-1-yl]-2-fluoro-4-oxo-4H-quinolino[2,3,4-i,j][1,4]benzoxazine-5-carboxylic acid  
 155035-58-8P, 1-[(3R)-3-Aminopyrrolidin-1-yl]-2-fluoro-4-oxo-4H-quinolino[2,3,4-i,j][1,4]benzoxazine-5-carboxylic acid  
 155035-59-9P, 1-[(3S)-3-Aminopyrrolidin-1-yl]-2-fluoro-9-methyl-4-oxo-4H-quinolino[2,3,4-i,j][1,4]benzoxazine-5-carboxylic acid hydrochloride  
 155035-60-2P, 1-[(3S)-3-Aminopyrrolidin-1-yl]-2-fluoro-9-methyl-4-oxo-4H-quinolino[2,3,4-i,j][1,4]benzoxazine-5-carboxylic acid  
 155035-62-4P, 1-[(3R)-3-Aminopyrrolidin-1-yl]-2-fluoro-9-methyl-4-oxo-4H-quinolino[2,3,4-i,j][1,4]benzoxazine-5-carboxylic acid hydrochloride  
 155035-63-5P, 1-[(3R)-3-Aminopyrrolidin-1-yl]-2-fluoro-9-methyl-4-oxo-4H-quinolino[2,3,4-i,j][1,4]benzoxazine-5-carboxylic acid  
 155035-65-7P, 1-(3-Aminopyrrolidin-1-yl)-8-tert-butyl-2-fluoro-4-oxo-4H-quinolino[2,3,4-i,j][1,4]benzoxazine-5-carboxylic acid hydrochloride  
 155035-66-8P, 1-(3-Aminopyrrolidin-1-yl)-8-tert-butyl-2-fluoro-4-oxo-4H-quinolino[2,3,4-i,j][1,4]benzoxazine-5-carboxylic acid  
 155035-72-6P, 2-Fluoro-1-[(3R)-3-norvalylaminopyrrolidin-1-yl]-4-oxo-4H-quinolino[2,3,4-i,j][1,4]benzoxazine-5-carboxylic acid hydrochloride  
 155035-74-8P, 2-Fluoro-1-[(3S)-3-norvalylaminopyrrolidin-1-yl]-4-oxo-4H-quinolino[2,3,4-i,j][1,4]benzoxazine-5-carboxylic acid hydrochloride  
 155035-76-0P, 2-Fluoro-9-methyl-1-[(3R)-3-norvalylaminopyrrolidin-1-yl]-4-oxo-4H-quinolino[2,3,4-i,j][1,4]benzoxazine-5-carboxylic acid hydrochloride  
 155035-79-3P, 1-(3-Aminopyrrolidin-1-yl)-8-ethylsulfonyl-2-fluoro-4-oxo-4H-quinolino[2,3,4-i,j][1,4]benzoxazine-5-carboxylic acid hydrochloride  
 155035-83-9P, 8-Ethylsulfonyl-2-fluoro-1-(3-norvalylaminopyrrolidin-1-yl)-4-oxo-4H-quinolino[2,3,4-i,j][1,4]benzoxazine-5-carboxylic acid hydrochloride  
 155035-86-2P, 1-[(2S,4S)-4-Amino-2-methylpyrrolidin-1-yl]-8,10-dimethyl-2-fluoro-4-oxo-4H-quinolino[2,3,4-i,j][1,4]benzoxazine-5-carboxylic acid hydrochloride  
 155035-90-8P, 1-(3-Aminopyrrolidin-1-yl)-2-fluoro-8,9-methylenedioxy-4-oxo-4H-quinolino[2,3,4-i,j][1,4]benzoxazine-5-carboxylic acid hydrochloride  
 155035-91-9P, 1-(3-Aminopyrrolidin-1-yl)-2-fluoro-8,9-methylenedioxy-4-oxo-4H-quinolino[2,3,4-i,j][1,4]benzoxazine-5-carboxylic acid  
 155036-02-5P, 1-[3-(Alanylalanylaminopyrrolidin-1-yl)-2-fluoro-4-oxo-4H-quinolino[2,3,4-i,j][1,4]benzoxazine-5-carboxylic acid hydrochloride  
 155036-06-9P, 1-[3-(Norvalylnorvalylaminopyrrolidin-1-yl)-2-fluoro-4-oxo-4H-quinolino[2,3,4-i,j][1,4]benzoxazine-5-carboxylic acid hydrochloride  
 155036-08-1P, 1-[3-(Alanylnorvalylaminopyrrolidin-1-yl)-2-fluoro-4-oxo-4H-quinolino[2,3,4-i,j][1,4]benzoxazine-5-carboxylic acid hydrochloride  
 155036-09-2P, 1-(3-Alanylnorvalylaminopyrrolidin-1-yl)-2-fluoro-4-oxo-4H-quinolino[2,3,4-i,j][1,4]benzoxazine-5-carboxylic acid  
 155036-11-6P, 1-[3-(Norvalylalanylaminopyrrolidin-1-yl)-2-fluoro-4-oxo-4H-quinolino[2,3,4-i,j][1,4]benzoxazine-5-carboxylic acid

L4 ANSWER 19 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)  
 hydrochloride 155036-12-7P, 1-(3-Norvalylalanylaminopyrrolidin-1-yl)-2-fluoro-4-oxo-4H-quinolino[2,3,4-i,j][1,4]benzoxazine-5-carboxylic acid 155036-14-9P, 1-[3-(Alanylalanylaminopyrrolidin-1-yl)-2-fluoro-4-oxo-4H-quinolino[2,3,4-i,j][1,4]benzoxazine-5-carboxylic acid 155036-15-0P, 1-(3-Norvalylnorvalylaminopyrrolidin-1-yl)-2-fluoro-4-oxo-4H-quinolino[2,3,4-i,j][1,4]benzoxazine-5-carboxylic acid 155036-16-1P 155036-17-2P 155036-23-0P  
 161311-46-2P, 1-[(2S,4S)-4-Amino-2-methylpyrrolidin-1-yl]-2-fluoro-8-methyl-4-oxo-4H-quinolino[2,3,4-i,j][1,4]benzoxazine-5-carboxylic acid hydrochloride  
 161311-47-3P, 1-[(2S,4S)-4-Amino-2-methylpyrrolidin-1-yl]-2-fluoro-4-oxo-4H-quinolino[2,3,4-i,j][1,4]benzoxazine-5-carboxylic acid hydrochloride  
 161311-48-4P, 1-[(3R)-3-Aminopyrrolidin-1-yl]-2-fluoro-4-oxo-4H-quinolino[2,3,4-i,j][1,4]benzoxazine-5-carboxylic acid hydrochloride  
 161311-49-6P, 1-[(3S)-3-Aminopyrrolidin-1-yl]-2-fluoro-4-oxo-4H-quinolino[2,3,4-i,j][1,4]benzoxazine-5-carboxylic acid hydrochloride  
 RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (prepn. as antineoplastic agent)  
 RN 111783-55-2 CAPLUS  
 CN 3H-Pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid, 6-[(3-amino-1-pyrrolidinyl)-5-fluoro-3-oxo- (9CI) (CA INDEX NAME)

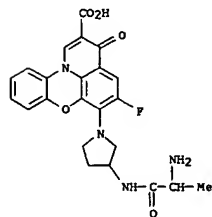


RN 142136-44-5 CAPLUS  
 CN 3H-Pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid, 6-[(2-amino-1-oxopentyl)amino]-1-pyrrolidinyl]-5-fluoro-3-oxo- (9CI) (CA INDEX NAME)

L4 ANSWER 19 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

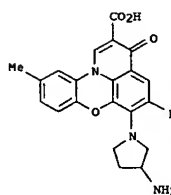


RN 142136-45-6 CAPLUS  
 CN 3H-Pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid, 6-[(2-amino-1-oxopentyl)amino]-1-pyrrolidinyl]-5-fluoro-3-oxo- (9CI) (CA INDEX NAME)

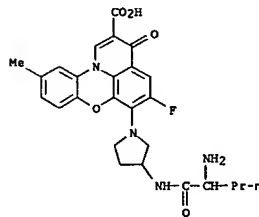


RN 142136-48-9 CAPLUS  
 CN 3H-Pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid, 6-[(3-amino-1-pyrrolidinyl)-5-fluoro-10-methyl-3-oxo- (9CI) (CA INDEX NAME)

L4 ANSWER 19 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



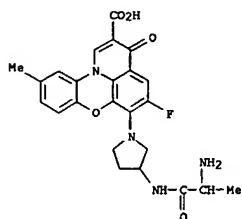
RN 142136-49-0 CAPLUS  
 CN 3H-Pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid, 6-[(2-amino-1-oxopentyl)amino]-1-pyrrolidinyl]-5-fluoro-10-methyl-3-oxo- (9CI) (CA INDEX NAME)



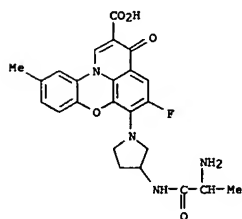
RN 142136-50-3 CAPLUS  
 CN 3H-Pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid, 6-[(2-amino-1-oxopentyl)amino]-1-pyrrolidinyl]-5-fluoro-10-methyl-3-oxo- (9CI) (CA INDEX NAME)



L4 ANSWER 19 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



RN 142247-45-8 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[3-((2-amino-1-oxopropyl)amino)-1-pyrrolidinyl]-5-fluoro-10-methyl-3-oxo-, monohydrochloride (9CI) (CA INDEX NAME)

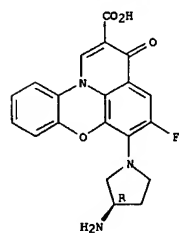


● HCl

RN 142247-46-9 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[3-((2-amino-1-oxopentyl)amino)-1-pyrrolidinyl]-5-fluoro-10-methyl-3-oxo-, monohydrochloride (9CI) (CA INDEX NAME)

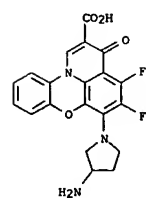
L4 ANSWER 19 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

Absolute stereochemistry.



● HCl

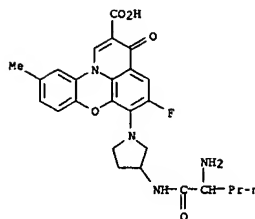
RN 142247-55-0 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[3-((2-amino-1-oxopentyl)amino)-1-pyrrolidinyl]-4,5-difluoro-3-oxo-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

RN 142247-56-1 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[3-((2-amino-1-oxopentyl)amino)-1-pyrrolidinyl]-4,5-difluoro-3-oxo-, monohydrochloride (9CI) (CA INDEX NAME)

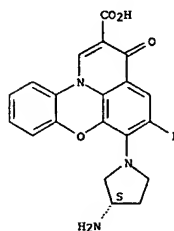
L4 ANSWER 19 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



● HCl

RN 142247-49-2 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[3-((2-amino-1-oxopentyl)amino)-1-pyrrolidinyl]-5-fluoro-3-oxo-, monohydrochloride, (5S) (9CI) (CA INDEX NAME)

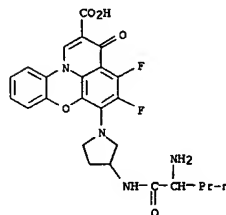
Absolute stereochemistry.



● HCl

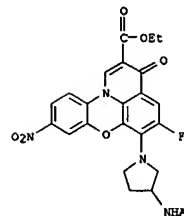
RN 142247-50-5 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[3-((2-amino-1-oxopentyl)amino)-1-pyrrolidinyl]-5-fluoro-3-oxo-, monohydrochloride, (R)- (9CI) (CA INDEX NAME)

L4 ANSWER 19 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



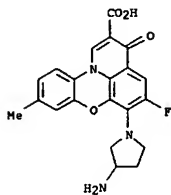
● HCl

RN 155035-39-4 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[3-((2-amino-1-oxopentyl)amino)-1-pyrrolidinyl]-5-fluoro-9-nitro-3-oxo-, ethyl ester (9CI) (CA INDEX NAME)

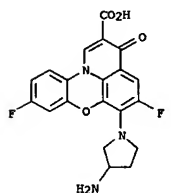


RN 155035-39-5 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[3-((2-amino-1-oxopentyl)amino)-1-pyrrolidinyl]-5-fluoro-9-methyl-3-oxo-, ethyl ester (9CI) (CA INDEX NAME)

L4 ANSWER 19 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



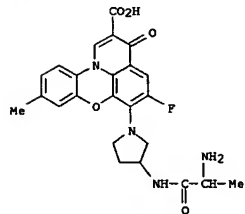
RN 155035-42-0 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-(3-amino-1-pyrrolidinyl)-5,9-difluoro-3-oxo-, monohydrochloride (9CI) (CA INDEX NAME)



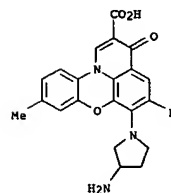
● HCl

RN 155035-44-2 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[(2-amino-1-oxopentyl)amino]-1-pyrrolidinyl]-5-fluoro-3-oxo-, monohydrochloride (9CI) (CA INDEX NAME)

L4 ANSWER 19 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



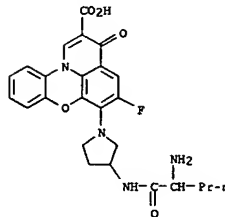
RN 155035-48-6 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-(3-amino-1-pyrrolidinyl)-5-fluoro-9-methyl-3-oxo-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

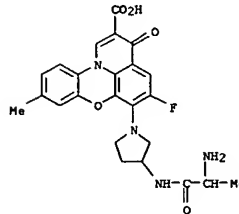
RN 155035-49-7 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[(2-amino-1-oxopentyl)amino]-1-pyrrolidinyl]-5-fluoro-9-methyl-3-oxo-, monohydrochloride (9CI) (CA INDEX NAME)

L4 ANSWER 19 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



● HCl

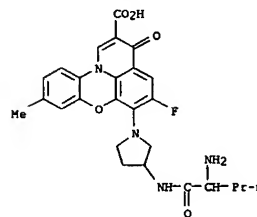
RN 155035-45-3 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[3-[(2-amino-1-oxopropyl)amino]-1-pyrrolidinyl]-5-fluoro-9-methyl-3-oxo-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

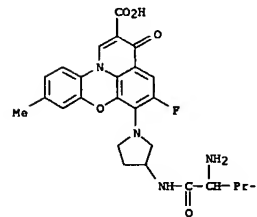
RN 155035-46-4 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[3-[(2-amino-1-oxopropyl)amino]-1-pyrrolidinyl]-5-fluoro-9-methyl-3-oxo- (9CI) (CA INDEX NAME)

L4 ANSWER 19 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



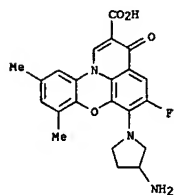
● HCl

RN 155035-50-0 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[3-[(2-amino-1-oxopropyl)amino]-1-pyrrolidinyl]-5-fluoro-9-methyl-3-oxo- (9CI) (CA INDEX NAME)



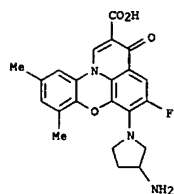
RN 155035-52-2 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-(3-amino-1-pyrrolidinyl)-5-fluoro-8,10-dimethyl-3-oxo-, monohydrochloride (9CI) (CA INDEX NAME)

L4 ANSWER 19 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



● HCl

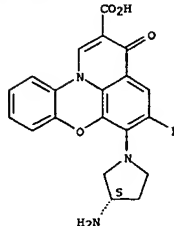
RN 155035-53-3 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-((3S)-3-amino-1-pyrrolidinyl)-5-fluoro-8,10-dimethyl-3-oxo- (9CI) (CA INDEX NAME)



RN 155035-57-7 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-((3S)-3-amino-1-pyrrolidinyl)-5-fluoro-3-oxo- (9CI) (CA INDEX NAME)

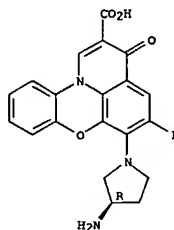
Absolute stereochemistry.

L4 ANSWER 19 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



RN 155035-58-8 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-((3R)-3-amino-1-pyrrolidinyl)-5-fluoro-3-oxo- (9CI) (CA INDEX NAME)

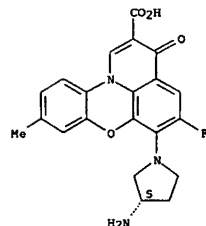
Absolute stereochemistry.



RN 155035-59-9 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-((3S)-3-amino-1-pyrrolidinyl)-5-fluoro-9-methyl-3-oxo-, monohydrochloride, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

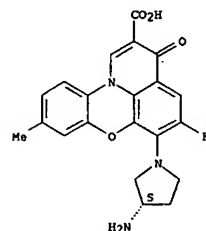
L4 ANSWER 19 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



● HCl

RN 155035-60-2 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-((3S)-3-amino-1-pyrrolidinyl)-5-fluoro-9-methyl-3-oxo-, (S)- (9CI) (CA INDEX NAME)

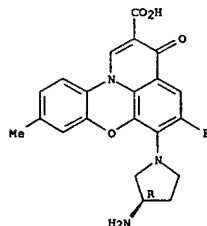
Absolute stereochemistry.



RN 155035-62-4 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-((3R)-3-amino-1-pyrrolidinyl)-5-fluoro-9-methyl-3-oxo-, monohydrochloride, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

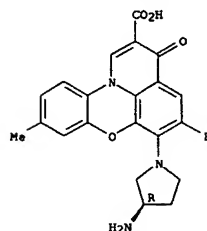
L4 ANSWER 19 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



● HCl

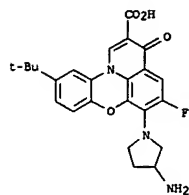
RN 155035-63-5 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-((3R)-3-amino-1-pyrrolidinyl)-5-fluoro-9-methyl-3-oxo-, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



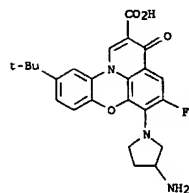
RN 155035-65-7 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-((3R)-3-amino-1-pyrrolidinyl)-10-(1,1-dimethylethyl)-5-fluoro-3-oxo-, monohydrochloride (9CI) (CA INDEX NAME)

L4 ANSWER 19 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



● HCl

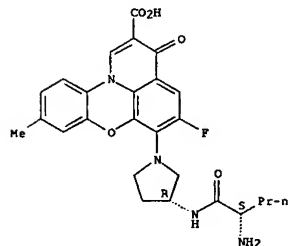
RN 155035-66-8 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-(3-amino-1-pyrrolidinyl)-10-(1,1-dimethylethyl)-5-fluoro-3-oxo- (9CI) (CA INDEX NAME)



RN 155035-72-6 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[3-[(2-amino-1-oxopentyl)amino]-1-pyrrolidinyl]-5-fluoro-3-oxo-, monohydrochloride, [R-(R\*,S\*)]- (9CI) (CA INDEX NAME)

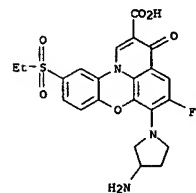
Absolute stereochemistry.

L4 ANSWER 19 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



● HCl

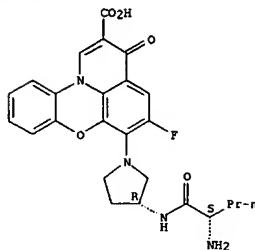
RN 155035-79-3 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-(3-amino-1-pyrrolidinyl)-10-(ethylsulfonyl)-5-fluoro-3-oxo-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

RN 155035-83-9 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[3-[(2-amino-1-oxopentyl)amino]-1-pyrrolidinyl]-10-(ethylsulfonyl)-5-fluoro-3-oxo-, monohydrochloride (9CI) (CA INDEX NAME)

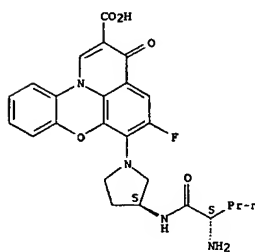
L4 ANSWER 19 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



● HCl

RN 155035-74-8 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[3-[(2-amino-1-oxopentyl)amino]-1-pyrrolidinyl]-5-fluoro-3-oxo-, monohydrochloride, [S-(R\*,R\*)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

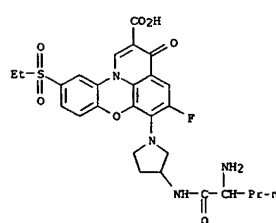


● HCl

RN 155035-76-0 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[3-[(2-amino-1-oxopentyl)amino]-1-pyrrolidinyl]-5-fluoro-9-methyl-3-oxo-, monohydrochloride, [R-(R\*,S\*)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

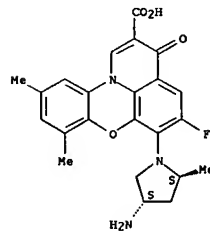
L4 ANSWER 19 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



● HCl

RN 155035-86-2 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-(4-amino-2-methyl-1-pyrrolidinyl)-5-fluoro-8,10-dimethyl-3-oxo-, monohydrochloride, (3S-trans)- (9CI) (CA INDEX NAME)

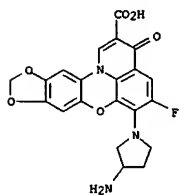
Absolute stereochemistry.



● HCl

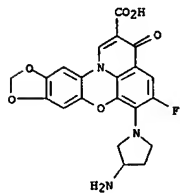
RN 155035-90-8 CAPLUS  
 CN 3H-[1,3]Dioxolo[4,5-b]pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-(3-amino-1-pyrrolidinyl)-5-fluoro-3-oxo-, monohydrochloride (9CI) (CA INDEX NAME)

L4 ANSWER 19 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



● HCl

RN 155035-91-9 CAPLUS  
 CN 3H-[1,3]Dioxolo[4,5-b]pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid,  
 6-(3-amino-1-pyrrolidinyl)-5-fluoro-3-oxo- (9CI) (CA INDEX NAME)

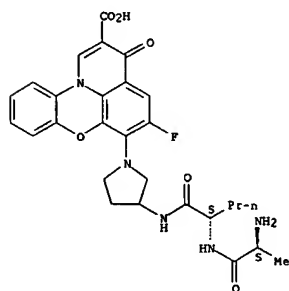


RN 155036-02-5 CAPLUS  
 CN L-Alaninamide, L-alanyl-N-[1-(2-carboxy-5-fluoro-3-oxo-3H-pyrido[3,2,1-kl]phenoxazin-6-yl)-3-pyrrolidinyl]-, monohydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L4 ANSWER 19 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)  
 kl]phenoxazin-6-yl)-3-pyrrolidinyl]-, monohydrochloride (9CI) (CA INDEX NAME)

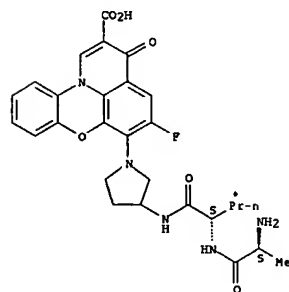
Absolute stereochemistry.



● HCl

RN 155036-09-2 CAPLUS  
 CN L-Norvalinamide, L-alanyl-N-[1-(2-carboxy-5-fluoro-3-oxo-3H-pyrido[3,2,1-kl]phenoxazin-6-yl)-3-pyrrolidinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

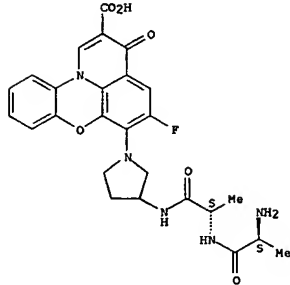


RN 155036-11-6 CAPLUS  
 CN L-Alaninamide, L-norvalyl-N-[1-(2-carboxy-5-fluoro-3-oxo-3H-pyrido[3,2,1-kl]phenoxazin-6-yl)-3-pyrrolidinyl]- (9CI) (CA INDEX NAME)

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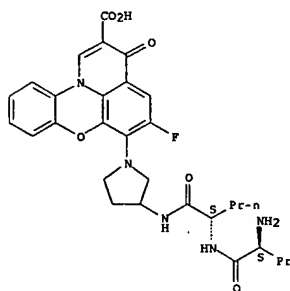
L4 ANSWER 19 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



● HCl

RN 155036-06-9 CAPLUS  
 CN L-Norvalinamide, L-norvalyl-N-[1-(2-carboxy-5-fluoro-3-oxo-3H-pyrido[3,2,1-kl]phenoxazin-6-yl)-3-pyrrolidinyl]-, monohydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.

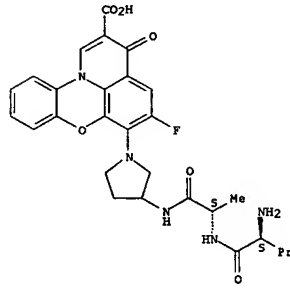


● HCl

RN 155036-08-1 CAPLUS  
 CN L-Norvalinamide, L-alanyl-N-[1-(2-carboxy-5-fluoro-3-oxo-3H-pyrido[3,2,1-kl]phenoxazin-6-yl)-3-pyrrolidinyl]-, monohydrochloride (9CI) (CA INDEX NAME)

L4 ANSWER 19 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)  
 kl]phenoxazin-6-yl)-3-pyrrolidinyl]-, monohydrochloride (9CI) (CA INDEX NAME)

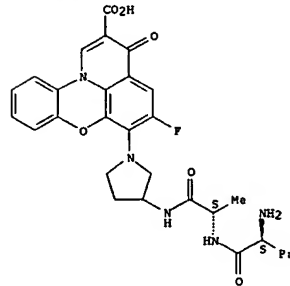
Absolute stereochemistry.



● HCl

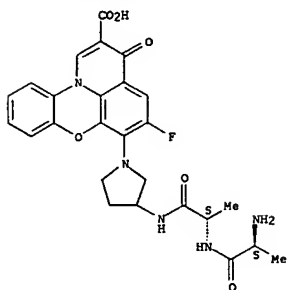
RN 155036-12-7 CAPLUS  
 CN L-Alaninamide, L-norvalyl-N-[1-(2-carboxy-5-fluoro-3-oxo-3H-pyrido[3,2,1-kl]phenoxazin-6-yl)-3-pyrrolidinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



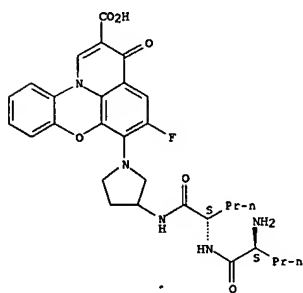
RN 155036-14-9 CAPLUS  
 CN L-Alaninamide, L-alanyl-N-[1-(2-carboxy-5-fluoro-3-oxo-3H-pyrido[3,2,1-kl]phenoxazin-6-yl)-3-pyrrolidinyl]- (9CI) (CA INDEX NAME)

L4 ANSWER 19 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)  
Absolute stereochemistry.



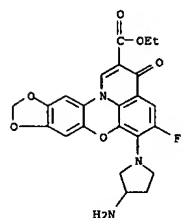
RN 155036-15-0 CAPLUS  
CN L-Norvalinamide, L-norvalyl-N-[1-(2-carboxy-5-fluoro-3-oxo-3H-pyrido[3,2,1-k]phenoxazin-6-yl)-3-pyrrolidinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



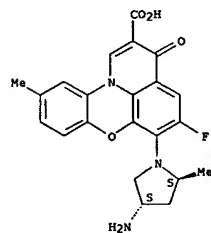
RN 155036-16-1 CAPLUS  
CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[3-(acetylamino)-1-

L4 ANSWER 19 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



RN 161311-46-2 CAPLUS  
CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-(4-amino-2-methyl-1-pyrrolidinyl)-5-fluoro-10-methyl-3-oxo-, monohydrochloride, (2S-trans)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

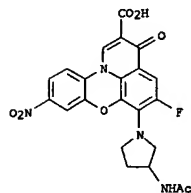


● HCl

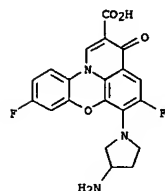
RN 161311-47-3 CAPLUS  
CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-(4-amino-2-methyl-1-pyrrolidinyl)-5-fluoro-3-oxo-, monohydrochloride, (2S-trans)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L4 ANSWER 19 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)  
pyrrolidinyl)-5-fluoro-9-nitro-3-oxo- (9CI) (CA INDEX NAME)

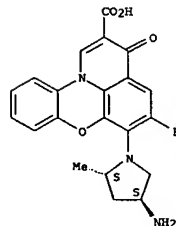


RN 155036-17-2 CAPLUS  
CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-(3-amino-1-pyrrolidinyl)-5,9-difluoro-3-oxo- (9CI) (CA INDEX NAME)



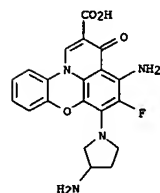
RN 155036-23-0 CAPLUS  
CN 3H-(1,3)Dioxolo[4,5-b]pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-(3-amino-1-pyrrolidinyl)-5-fluoro-3-oxo-, ethyl ester (9CI) (CA INDEX NAME)

L4 ANSWER 19 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



● HCl

RN 161311-48-4 CAPLUS  
CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 4-amino-6-(3-amino-1-pyrrolidinyl)-5-fluoro-3-oxo-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

IT 100828-11-3, 1,2-Difluoro-4-oxo-4H-quinolino[2,3,4-i,j][1,4]benzoxazine-5-carboxylic acid 111783-54-1, 1-(3-Aminopyrrolidin-1-yl)-2-fluoro-4-oxo-4H-quinolino[2,3,4-i,j][1,4]benzoxazine-5-carboxylic acid hydrochloride 161311-45-1, 1,2-Difluoro-8-methyl-4-oxo-4H-quinolino[2,3,4-i,j][1,4]benzoxazine-5-carboxylic acid  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(reaction of, in preparation of antineoplastic agent)

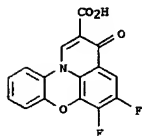
RN 100828-11-3 CAPLUS  
CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 5,6-difluoro-3-oxo- (9CI) (CA INDEX NAME)

<02/09/2006>

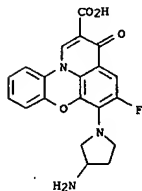
Habte

L4 ANSWER 19 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

L4 ANSWER 19 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

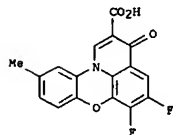


RN 111783-54-1 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-(3-amino-1-pyrrolidinyl)-5-fluoro-3-oxo-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

RN 161311-45-1 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 5,6-difluoro-10-methyl-3-oxo-, monohydrochloride (9CI) (CA INDEX NAME)



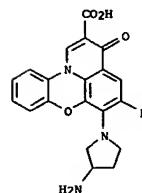
L4 ANSWER 20 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 1995:373651 CAPLUS  
 DOCUMENT NUMBER: 122:204687  
 TITLE: Biological characterization of a novel antitumor quinolone  
 AUTHOR(S): Clement, Jacob J.; Burres, Neal; Jarvis, Kenneth; Chu, Daniel T. W.; Swinlarski, Joseph; Alder, Jeffrey  
 CORPORATE SOURCE: Abbott Laboratories, Abbott Park, IL, 60064-3500, USA  
 SOURCE: Cancer Research (1995), 55(4), 830-5  
 CODEN: CNREAS; ISSN: 0008-5472  
 PUBLISHER: American Association for Cancer Research  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English

AB A-84441, a potent new antitumor quinolone, was active in vitro and in vivo against murine and human tumors. A-84441, a prodrug, was comparable in potency to the parent compound with an IC50 range of 0.03-0.49 µg/ml against a panel of murine and human tumor cell lines. The parent compound bound mammalian DNA in a magnesium-dependent manner and caused inhibition of DNA and RNA synthesis. A-84441 produced a significant increased life span and cures in three lines of i.p. implanted murine tumors. A-84441 was active against seven of nine solid tumors including s.c. murine tumors and human tumor xenografts. The compound appeared to be more active when administered i.v. compared to i.p. injection. Antitumor efficacy was little affected by treatment schedule, although multiple divided dosing was generally more effective than single dose treatment. A-84441 was over 10-fold more active against murine leukemic cells than against normal murine bone marrow cells. The acute toxicity of A-84441 following single or multiple dosing ranged between 11 and 50 mg/kg dependent on schedule of administration when given by i.v. or i.p. route. The agent has no apparent toxicity or efficacy when administered p.o.

IT 111783-55-2, A 83669 142136-44-5, A 84441  
 RI: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

animal (antitumor activity of quinolone A-84441 against human and laboratory cells)

RN 111783-55-2 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-(3-amino-1-pyrrolidinyl)-5-fluoro-3-oxo-, monohydrochloride (9CI) (CA INDEX NAME)

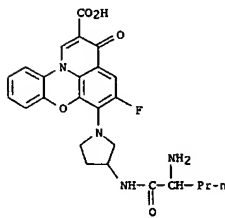


RN 142136-44-5 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-(3-[(2-amino-1-pyrrolidinyl)-5-fluoro-3-oxo-]-1-pyrrolidinyl)-5-fluoro-3-oxo-, monohydrochloride (9CI) (CA INDEX NAME)

&lt;02/09/2006&gt;

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L4 ANSWER 20 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)  
 oxopentyl)amino]-1-pyrrolidinyl)-5-fluoro-3-oxo-, monohydrochloride (9CI) (CA INDEX NAME)



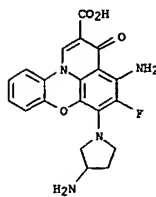
L4 ANSWER 21 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 1995:341668 CAPLUS  
 DOCUMENT NUMBER: 122:204540  
 TITLE: Synthesis and antitumor activities of tetracyclic quinolone antineoplastic agents  
 AUTHOR(S): Chu, D.T.W.; Hallas, R.; Tanaka, S.K.; Alder, J.; Balli, D.; Plattner, J.J.  
 CORPORATE SOURCE: Antiinfective Research Division, Abbott Laboratories, Abbott Park, IL, 60064-3500, USA  
 SOURCE: Drugs under Experimental and Clinical Research (1994), 20(5), 117-83  
 CODEN: DECRDP; ISSN: 0378-6501  
 PUBLISHER: Bioscience Ediprint  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English

AB DNA topoisomerases, found in all prokaryotic and eukaryotic cells, play a key role in controlling the topol. state of DNA. They are involved in DNA replication, RNA transcription and recombination affecting cell proliferation. Quinolone antibacterial agents have been shown to be inhibitors of DNA gyrase, a bacterial topoisomerase II enzyme. The eukaryotic topoisomerase II is the target of various cytotoxic agents such as adriamycin and etoposide. Due to the mechanistic similarities and sequence homologies shared by both bacterial and mammalian DNA topoisomerase II, we initiated a screening program to search for quinolones as antitumor agents and reported the identification of a new class of quinolone, quinobenoxazines, having excellent in vitro cytotoxic activity comparable to adriamycin. In the continuation of this research work, we synthesized a series of amino-substituted quinobenoxazines and found that some of them possess more potent in vitro cytotoxicity than the parent unsubstituted quinobenoxazines. The chemical synthesis as well as biol. properties of these tetracyclic quinolones are described.

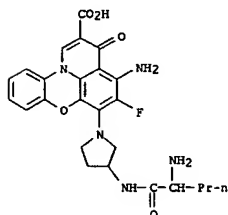
IT 155035-94-2P 161886-62-OP 161886-63-IP  
 161886-64-2P 161886-65-3P 161886-66-4P  
 161886-67-5P  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)  
 (tetracyclic quinolone antineoplastic agents preparation and antitumor activities)

RN 155035-94-2 CAPLUS  
 CN 3H-Pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid, 4-amino-6-[(2-amino-1-pyrrolidinyl)-5-fluoro-3-oxo- (9CI) (CA INDEX NAME)

L4 ANSWER 21 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

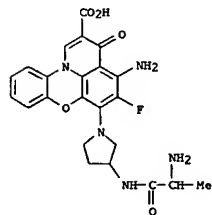


RN 161886-62-0 CAPLUS  
 CN 3H-Pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid, 4-amino-6-[3-[(2-amino-1-oxopentyl)amino]-1-pyrrolidinyl]-5-fluoro-3-oxo- (9CI) (CA INDEX NAME)



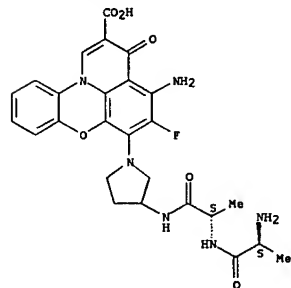
RN 161886-63-1 CAPLUS  
 CN 3H-Pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid, 4-amino-6-[3-[(2-amino-1-oxopropyl)amino]-1-pyrrolidinyl]-5-fluoro-3-oxo- (9CI) (CA INDEX NAME)

L4 ANSWER 21 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



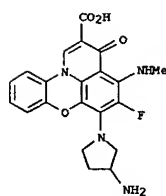
RN 161886-64-2 CAPLUS  
 CN L-Alaninamide, L-alanyl-N-[1-(4-amino-2-carboxy-5-fluoro-3-oxo-3H-pyrido[3,2,1-kl]phenoxazin-6-yl)-3-pyrrolidinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

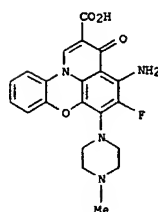


RN 161886-65-3 CAPLUS  
 CN 3H-Pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid, 6-(3-amino-1-pyrrolidinyl)-5-fluoro-4-(methylamino)-3-oxo- (9CI) (CA INDEX NAME)

L4 ANSWER 21 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



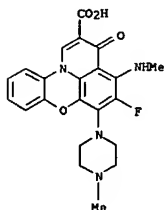
RN 161886-66-4 CAPLUS  
 CN 3H-Pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid, 4-amino-5-fluoro-6-(4-methyl-1-piperazinyl)-3-oxo- (9CI) (CA INDEX NAME)



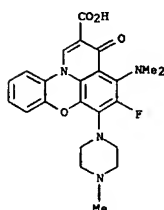
RN 161886-67-5 CAPLUS  
 CN 3H-Pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid, 5-fluoro-4-(methylamino)-6-(4-methyl-1-piperazinyl)-3-oxo- (9CI) (CA INDEX NAME)



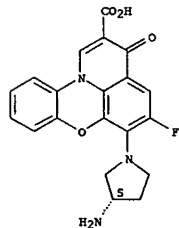
L4 ANSWER 21 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



IT 161886-68-6P  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)  
 (tetracyclic quinolone antineoplastic agents preparation and antitumor activities)  
 RN 161886-68-6 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 4-(dimethylamino)-5-fluoro-6-(4-methyl-1-piperazinyl)-3-oxo- (9CI) (CA INDEX NAME)

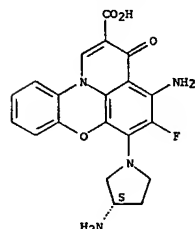


L4 ANSWER 22 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



RN 161897-95-6 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 4-amino-6-(3-amino-1-pyrrolidinyl)-5-fluoro-3-oxo-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L4 ANSWER 22 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 1995:320184 CAPLUS  
 DOCUMENT NUMBER: 122:230268

TITLE: Self-Assembly of a Quinobenzoxazine-Mg2+ Complex on DNA: A New Paradigm for the Structure of a Drug-DNA Complex and Implications for the Structure of the Quinolone Bacterial Gyrase-DNA Complex  
 AUTHOR(S): Fan, Jun-Yao; Sun, Daekyu; Yu, Hongtao; Kervin, Sean M.; Hurley, Laurence H.  
 CORPORATE SOURCE: College of Pharmacy, University of Texas, Austin, TX, 78712-1074, USA  
 SOURCE: Journal of Medicinal Chemistry (1995), 38(3), 408-24  
 CODEN: JMCHAR; ISSN: 0022-2623  
 PUBLISHER: American Chemical Society  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English

AB The quinobenzoxazine compds. A-62176 and A-85226 belong to a novel class of antineoplastic agents that are catalytic inhibitors of topoisomerase II and also structural analogs of the antibacterial DNA gyrase inhibitor Norfloxacin. In vitro studies have shown that their antineoplastic activity is dependent upon the presence of divalent metal ions such as Mg2+ and Mn2+, although the precise role of these ions in the mechanism of action is unknown. In this study we have investigated the structures of the binary complex between the quinobenzoxazines and Mg2+ and the ternary complex between quinobenzoxazine-Mg2+ and DNA. The stoichiometry of the binary and ternary complexes and the biophys. studies suggest that a 2:2 drug:Mg2+ complex forms a "heterodimer complex" with respect to DNA in which one drug mol. is intercalated into DNA and the second drug mol. is externally bound, held to the first mol. by two Mg2+ bridges, which themselves are chelated to phosphates on DNA. There is a cooperativity in binding of the quinobenzoxazines to DNA, and a 4:4 drug:Mg2+ complex is proposed in which the two externally bound mols. from two different 2:2 dimers interact via  $\pi-\pi$  interactions. The externally bound quinobenzoxazine mols. can be replaced by the quinolone antibacterial compound Norfloxacin to form mixed-structure dimers on DNA. Based upon the proposed model for the 2:2 quinobenzoxazine:Mg2+ complex on DNA, a parallel model for the antibacterial quinolone-Mg2+-DNA gyrase complex is proposed that relies upon the ATP-fueled unwinding of DNA by gyrase downstream of the cleavable complex site. These models, which have analogies to leucine zippers, represent a new paradigm for the structure of drug-DNA complexes. In addition, these models have important implications

for the design of new gyrase and topoisomerase II inhibitors, in that optimization for structure-activity relationships should be carried out on two different quinolone mols. rather than a single mol.

IT 155035-37-7B, (S)-A 62176, complexes with divalent metal ions and with DNA 161897-95-6D, (S)-A 85226, complexes with magnesium ions and with DNA  
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)  
 (self-assembly of quinobenzoxazine-magnesium complex on DNA)  
 RN 155035-57-7 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[(3S)-3-amino-1-pyrrolidinyl]-5-fluoro-3-oxo- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L4 ANSWER 23 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 1994:570007 CAPLUS  
 DOCUMENT NUMBER: 121:170007

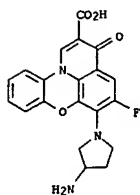
TITLE: Quinobenzoxazines: A Class of Novel Antitumor Quinolones and Potent Mammalian DNA Topoisomerase II Catalytic Inhibitors  
 AUTHOR(S): Permana, Paskasari A.; Snapka, Robert M.; Shen, Linus L.; Chu, Daniel T. W.; Clement, J. J.; Platcher, J. J.  
 CORPORATE SOURCE: Department of Radiology, Ohio State University, Columbus, OH, 43210, USA  
 SOURCE: Biochemistry (1994), 33(37), 11333-39  
 CODEN: BICHAU; ISSN: 0006-2960  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English

AB The antineoplastic quinobenzoxazines A-62176 and A-74932 were shown to be potent inhibitors of mammalian DNA topoisomerase II in vivo. This was demonstrated by their selective inhibition of the SV40 DNA replication stages that require topoisomerase II. Neither drug stabilized a covalent complex of the enzyme with SV40 DNA, which suggests that they are not poisons of DNA topoisomerase II. A-77601, an analog having little antitumor activity, barely inhibited DNA topoisomerase II in vivo, even at high concns. These findings were supported by in vitro studies which showed that A-62176 and A-74932, but not A-77601, strongly inhibited the catalytic activity of mammalian DNA topoisomerase II. A-62176 did not cause topoisomerase II-mediated DNA strand breaks in vitro under conditions in which adriamycin produced extensive DNA breakage. The antineoplastic and topoisomerase inhibitory activities of the quinobenzoxazines correlate with their ability to unwind DNA. A-62176 antagonized the poisoning of topoisomerase II by VM-26 in vivo and in vitro, but had no effect on DNA breakage induced by camptothecin, a DNA topoisomerase I poison. A-62176 and A-74932 thus inhibit DNA topoisomerase II reactions at a step prior to the formation of the "cleavable complex" intermediate. These findings indicate that stabilization of the DNA topoisomerase II-DNA cleavable complex is not necessary for the antitumor activity of this class of quinolones and that the catalytic inhibition of DNA topoisomerase II may contribute significantly to the anticancer activity of other DNA topoisomerase II inhibitors.

IT 111783-54-1, A-62176 148201-60-9, A-74932 157744-30-4, A 77601  
 RL: BIOL (Biological study)  
 (DNA topoisomerase II catalytic inhibition by, antitumor activity in relation to)

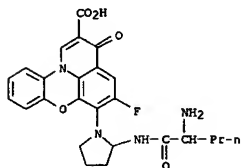
RN 111783-54-1 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-(3-amino-1-pyrrolidinyl)-5-fluoro-3-oxo-, monohydrochloride (9CI) (CA INDEX NAME)

L4 ANSWER 23 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



● HCl

RN 148201-60-9 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[2-[(2-amino-1-oxopentyl)amino]-1-pyrrolidinyl]-5-fluoro-3-oxo-, monohydrochloride (9CI)  
 (CA INDEX NAME)

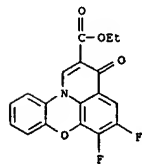


● HCl

RN 157744-30-4 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[3-(acetamino)-1-pyrrolidinyl]-5-fluoro-3-oxo- (9CI) (CA INDEX NAME)

L4 ANSWER 24 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1994:465699 CAPLUS  
 DOCUMENT NUMBER: 121:65699  
 TITLE: Determination of minor impurities and diastereomers of 6-[3-[(2-amino-1-oxopentyl)amino]-1-pyrrolidinyl]-5-fluoro-3-oxo-3H-pyrido[3,2,1-k]phenoxazine-2-carboxylic acid hydrochloride by high performance liquid chromatography  
 AUTHOR(S): Golich, Timothy G.; Eldrod, Lee, Jr.; Morley, James A.  
 CORPORATE SOURCE: PPD Phys. Anal. Chem. Dep., Abbot Lab., North Chicago, IL, 60064, USA  
 SOURCE: Journal of Liquid Chromatography (1994), 17(9), 2005-16  
 CODEN: JLCHE8; ISSN: 0148-3919  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 AB Diastereomers of the quinobenoxazine antineoplastic drug Abbott-8444.1 and minor impurities were determined using high-performance liquid chromatog. Manufacturing impurities, degradation products, and diastereomers were separated using a reversed phase system with gradient elution. Detector response was linear for Abbott-8444.1 to approx. 20 µg/mL which represents 4.0% of the drug concentration. The procedure provides quantitation of impurities to approx. the 0.1% level with precision (relative standard deviations) of 7.3% to 31% in typical bulk drug lots. A variety of reversed-phase columns were evaluated for the assay method with the optimum resolution achieved using a 5-µm Alltima C18 packing.  
 IT 100820-10-2 100820-11-3 111783-55-2  
 142136-72-9 155035-73-7 155035-75-9  
 156217-06-0  
 RL: ANT (Analyte); ANST (Analytical study)  
 (determination of, by HPLC)  
 RN 100820-10-2 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 5,6-difluoro-3-oxo-, ethyl ester (9CI) (CA INDEX NAME)

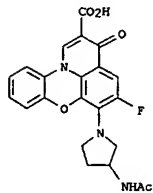


RN 100820-11-3 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 5,6-difluoro-3-oxo- (9CI) (CA INDEX NAME)

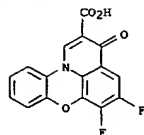
&lt;02/09/2006&gt;

Habte

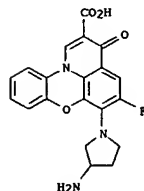
L4 ANSWER 23 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



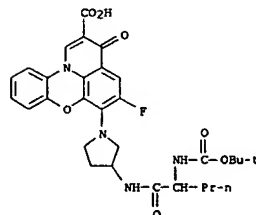
L4 ANSWER 24 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



RN 111783-55-2 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-(3-amino-1-pyrrolidinyl)-5-fluoro-3-oxo- (9CI) (CA INDEX NAME)



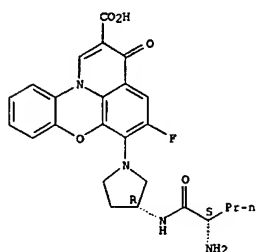
RN 142136-72-9 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[3-[[[2-[(1,1-dimethylethoxy)carbonyl]amino]-1-oxopentyl]amino]-1-pyrrolidinyl]-5-fluoro-3-oxo- (9CI) (CA INDEX NAME)



RN 155035-73-7 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[3-[(2-amino-1-

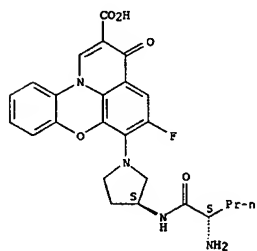
L4 ANSWER 24 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)  
oxopentyl]amino]-1-pyrrolidinyl]-5-fluoro-3-oxo-, [R-(R\*,S\*)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



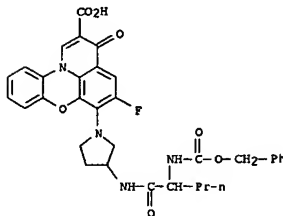
RN 155035-75-9 CAPLUS  
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Absolute stereochemistry.



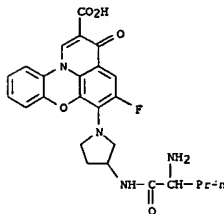
RN 156217-06-0 CAPLUS  
CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 5-fluoro-3-oxo-6-[3-[[1-oxo-2-[(phenylmethoxy)carbonyl]amino]pentyl]amino]-1-pyrrolidinyl]- (9CI)

L4 ANSWER 24 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)  
(CA INDEX NAME)



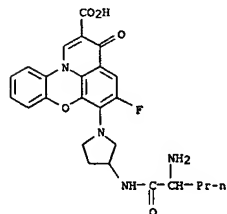
IT 142136-44-5 155035-44-2  
RL: ANST (Analytical study)  
(resolution of diastereomers of, by HPLC)

RN 142136-44-5 CAPLUS  
CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[3-[(2-amino-1-oxopentyl)amino]-1-pyrrolidinyl]-5-fluoro-3-oxo- (9CI) (CA INDEX NAME)



RN 155035-44-2 CAPLUS  
CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[3-[(2-amino-1-oxopentyl)amino]-1-pyrrolidinyl]-5-fluoro-3-oxo-, monohydrochloride (9CI) (CA INDEX NAME)

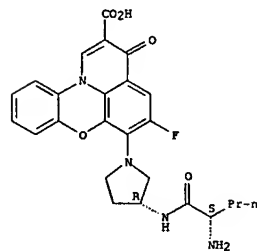
L4 ANSWER 24 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



● HCl

IT 155035-72-6 155035-74-8  
RL: ANT (Analyte), ANST (Analytical study)  
(separation of, by HPLC)  
RN 155035-72-6 CAPLUS  
CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[3-[(2-amino-1-oxopentyl)amino]-1-pyrrolidinyl]-5-fluoro-3-oxo-, monohydrochloride, [R-(R\*,S\*)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

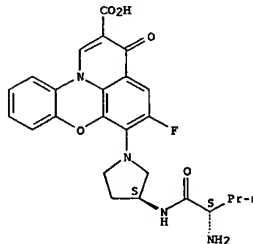


● HCl

RN 155035-74-8 CAPLUS  
CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[3-[(2-amino-1-oxopentyl)amino]-1-pyrrolidinyl]-5-fluoro-3-oxo-, monohydrochloride, [S-(R\*,R\*)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L4 ANSWER 24 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



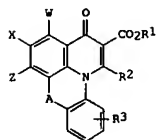
● HCl

<02/09/2006>

Habte

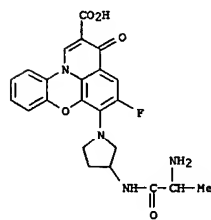
L4 ANSWER 25 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)  
 ACCESSION NUMBER: 1994:298636 CAPLUS  
 DOCUMENT NUMBER: 120:298636  
 TITLE: Quinobenzoxazine, quinobenzothiazine and pyridoacridine antineoplastic agents  
 INVENTOR(S): Chu, Daniel T.; Plattner, Jacob J.; Hallas, Robert  
 PATENT ASSIGNEE(S): Abbott Laboratories, USA  
 SOURCE: PCT Int. Appl., 83 pp.  
 CODEN: PIXX02  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 3  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9316702	A1	19930902	WO 1993-US1766	19930226
W: AU, CA, JP, KR				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
US 5318965	A	19940607	US 1992-842910	19920227
AU 9337803	A1	19930913	AU 1993-37803	19930226
JP 07500611	T2	19950119	JP 1993-515097	19930226
JP 2578576	B2	19970205		
PRIORITY APPLN. INFO.:				
US 1992-842910 A 19920227				
US 1990-573102 B2 19900824				
WO 1993-US1766 A 19930226				
OTHER SOURCE(S): MARPAT 120:298636				
GI				

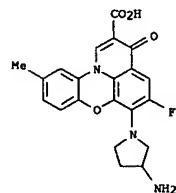


AB The title compds. [1: A = O, CH<sub>2</sub>, S; R<sub>1</sub> = H, carboxy-protecting group; R<sub>2</sub> = H, C1-6 alkyl, C1-6 alkoxy, C1-6 sulhydroalkyl; R<sub>3</sub> = H, halogen, NO<sub>2</sub>, C1-6 alkyl, CO<sub>2</sub>H, methylenedioxy, CN, halo-substituted C1-6 alkyl, hydroxy-substituted C1-6 alkyl, (un)substituted amino, etc.; W = H, C1-6 alkyl, (un)substituted amino, halogen, alkoxy, HO, etc.; X = H, halogen, C1-6 alkyl, halo-substituted C1-6 alkyl; Z = halogen, (un)substituted N-containing heterocyclo, etc.], useful for the treatment of leukemia, melanoma, lung, colon, and ovarian carcinomas, are prepared. Thus, 1-(3-aminopyrrolidin-1-yl)-2-fluoro-4-oxo-4H-quinol[2,3,4-i,j][1,4]benzoxazine-5-carboxylic acid hydrochloride was converted into 1-(3-allylallylaminopyrrolidin-1-yl)-2-fluoro-4-oxo-4H-quinol[2,3,4-

L4 ANSWER 25 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)  
 RN 142136-45-6 CAPLUS  
 CN 3H-Pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid, 6-[3-[(2-amino-1-oxopropyl)amino]-1-pyrrolidinyl]-5-fluoro-3-oxo- (9CI) (CA INDEX NAME)



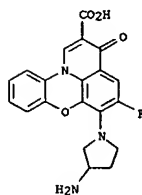
RN 142136-48-9 CAPLUS  
 CN 3H-Pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid, 6-[3-[(2-amino-1-pyrrolidinyl)-5-fluoro-10-methyl-3-oxo- (9CI) (CA INDEX NAME)



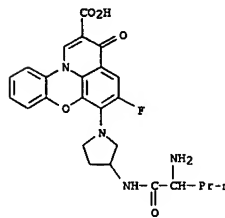
RN 142136-49-0 CAPLUS  
 CN 3H-Pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid, 6-[3-[(2-amino-1-oxopentyl)amino]-1-pyrrolidinyl]-5-fluoro-10-methyl-3-oxo- (9CI) (CA INDEX NAME)

L4 ANSWER 25 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)  
 i,j][1,4]benzoxazine-5-carboxylic acid hydrochloride (II) in 4 steps. II demonstrated 197% mean lifespan comparison value when administered at 20 mg/kg to colon adenocarcinoma-implanted mice, vs. 100% for similarly implanted mice receiving no treatment.  
 IT 111783-55-2 142136-44-5 142136-45-6  
 142136-48-9 142136-49-0 142136-50-3  
 155035-39-5 155035-46-4 155035-50-0  
 155036-09-2 155036-12-7 155036-14-9  
 155036-16-1 155036-17-2  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

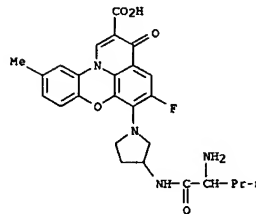
RN 111783-55-2 CAPLUS  
 CN 3H-Pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid, 6-[3-[(2-amino-1-pyrrolidinyl)-5-fluoro-3-oxo- (9CI) (CA INDEX NAME)



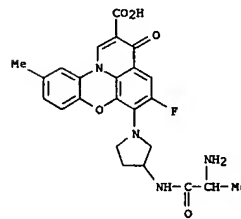
RN 142136-44-5 CAPLUS  
 CN 3H-Pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid, 6-[3-[(2-amino-1-oxopentyl)amino]-1-pyrrolidinyl]-5-fluoro-3-oxo- (9CI) (CA INDEX NAME)



L4 ANSWER 25 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

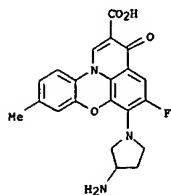


RN 142136-50-3 CAPLUS  
 CN 3H-Pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid, 6-[3-[(2-amino-1-oxopentyl)amino]-1-pyrrolidinyl]-5-fluoro-10-methyl-3-oxo- (9CI) (CA INDEX NAME)

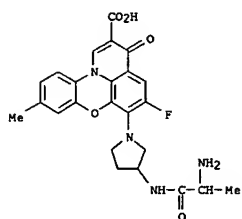


RN 155035-39-5 CAPLUS  
 CN 3H-Pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid, 6-[3-[(2-amino-1-pyrrolidinyl)-5-fluoro-9-methyl-3-oxo- (9CI) (CA INDEX NAME)

L4 ANSWER 25 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

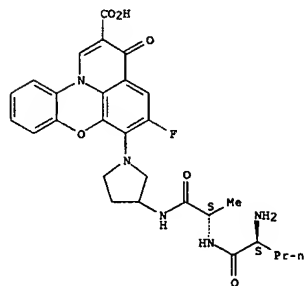


RN 155035-46-4 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[3-[(2-amino-1-oxopropyl)amino]-1-pyrrolidinyl]-5-fluoro-9-methyl-3-oxo- (9CI) (CA INDEX NAME)



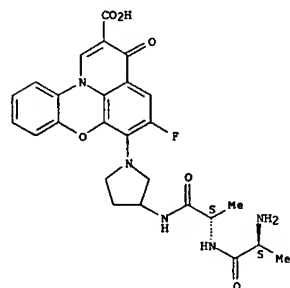
RN 155035-50-0 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[3-[(2-amino-1-oxopentyl)amino]-1-pyrrolidinyl]-5-fluoro-9-methyl-3-oxo- (9CI) (CA INDEX NAME)

L4 ANSWER 25 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



RN 155036-14-9 CAPLUS  
 CN L-Alaninamide, L-alanyl-N-[1-(2-carboxy-5-fluoro-3-oxo-3H-pyrido[3,2,1-k]phenoxazin-6-yl)-3-pyrrolidinyl]- (9CI) (CA INDEX NAME)

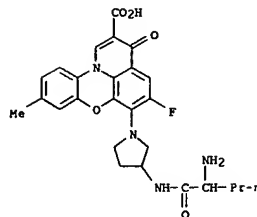
Absolute stereochemistry.



RN 155036-16-1 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[3-(acetamino)-1-pyrrolidinyl]-5-fluoro-9-nitro-3-oxo- (9CI) (CA INDEX NAME)

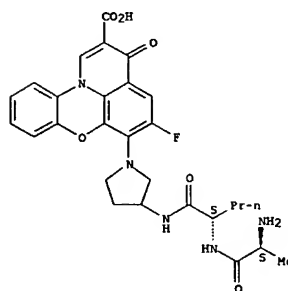
&lt;02/09/2006&gt;

L4 ANSWER 25 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



RN 155036-09-2 CAPLUS  
 CN L-Norvalinamide, L-alanyl-N-[1-(2-carboxy-5-fluoro-3-oxo-3H-pyrido[3,2,1-k]phenoxazin-6-yl)-3-pyrrolidinyl]- (9CI) (CA INDEX NAME)

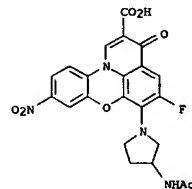
Absolute stereochemistry.



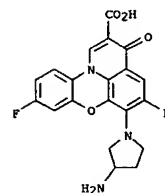
RN 155036-12-7 CAPLUS  
 CN L-Alaninamide, L-norvalyl-N-[1-(2-carboxy-5-fluoro-3-oxo-3H-pyrido[3,2,1-k]phenoxazin-6-yl)-3-pyrrolidinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L4 ANSWER 25 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



RN 155036-17-2 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[3-amino-1-pyrrolidinyl]-5,9-difluoro-3-oxo- (9CI) (CA INDEX NAME)



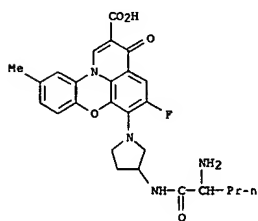
IT 142136-49-0P 142136-50-3P 142247-43-6P  
 142247-45-8P 142247-46-9P 142247-49-2P  
 142247-55-0P 142247-56-1P 155035-38-4P  
 155035-39-5P 155035-42-0P 155035-45-3P  
 155035-46-4P 155035-48-6P 155035-49-7P  
 155035-50-0P 155035-52-2P 155035-53-3P  
 155035-57-7P 155035-59-9P 155035-60-2P  
 155035-65-7P 155035-66-8P 155035-69-1P  
 155035-71-5P 155035-72-6P 155035-73-7P  
 155035-74-8P 155035-75-9P 155035-76-0P  
 155035-77-1P 155035-83-9P 155035-84-0P  
 155035-86-2P 155035-87-3P 155035-90-8P  
 155035-91-9P 155035-94-2P 155036-02-5P  
 155036-08-1P 155036-09-2P 155036-11-6P  
 155036-12-7P 155036-14-9P 155036-15-0P  
 155036-17-2P 155036-23-0P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOU (Biological study); PREP (Preparation); USES (Uses) (preparation and antineoplastic activity of)

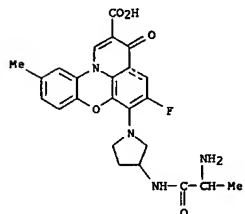
RN 142136-49-0 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[3-[(2-amino-1-

Habte

L4 ANSWER 25 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)  
 oxopentyl)amino]-1-pyrrolidinyl]-5-fluoro-10-methyl-3-oxo- (9CI) (CA INDEX NAME)

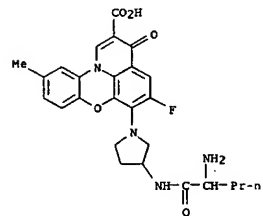


RN 142136-50-3 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[3-[(2-amino-1-oxopentyl)amino]-1-pyrrolidinyl]-5-fluoro-10-methyl-3-oxo- (9CI) (CA INDEX NAME)



RN 142247-43-6 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[3-[(2-amino-1-pyrrolidinyl)-5-fluoro-10-trimethyl-3-oxo-, monohydrochloride (9CI) (CA INDEX NAME)

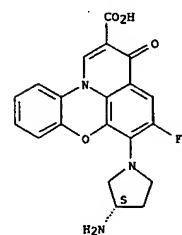
L4 ANSWER 25 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



● HCl

RN 142247-49-2 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[3-[(2-amino-1-pyrrolidinyl)-5-fluoro-3-oxo-, monohydrochloride, (S)- (9CI) (CA INDEX NAME)

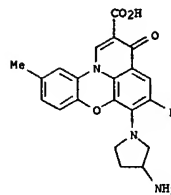
Absolute stereochemistry.



● HCl

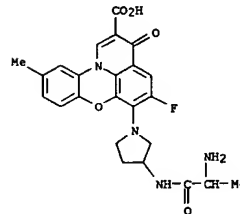
RN 142247-55-0 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[3-[(2-amino-1-pyrrolidinyl)-4,5-difluoro-3-oxo-, monohydrochloride (9CI) (CA INDEX NAME)

L4 ANSWER 25 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



● HCl

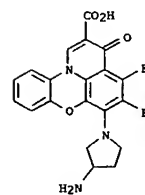
RN 142247-45-8 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[3-[(2-amino-1-oxopentyl)amino]-1-pyrrolidinyl]-5-fluoro-10-methyl-3-oxo-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

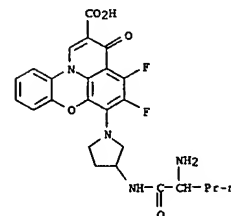
RN 142247-46-9 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[3-[(2-amino-1-oxopentyl)amino]-1-pyrrolidinyl]-5-fluoro-10-methyl-3-oxo-, monohydrochloride (9CI) (CA INDEX NAME)

L4 ANSWER 25 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



● HCl

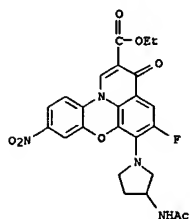
RN 142247-56-1 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[3-[(2-amino-1-oxopentyl)amino]-1-pyrrolidinyl]-4,5-difluoro-3-oxo-, monohydrochloride (9CI) (CA INDEX NAME)



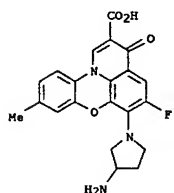
● HCl

RN 155035-38-4 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[3-[(2-amino-1-pyrrolidinyl)-5-fluoro-9-nitro-3-oxo-, ethyl ester (9CI) (CA INDEX NAME)

L4 ANSWER 25 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

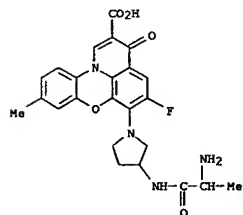


RN 155035-39-5 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-(3-amino-1-pyrrolidinyl)-5-fluoro-9-methyl-3-oxo- (9CI) (CA INDEX NAME)

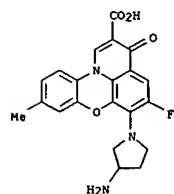


RN 155035-42-0 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-(3-amino-1-pyrrolidinyl)-5,9-difluoro-3-oxo-, monohydrochloride (9CI) (CA INDEX NAME)

L4 ANSWER 25 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



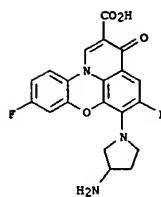
RN 155035-48-6 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-(3-amino-1-pyrrolidinyl)-5-fluoro-9-methyl-3-oxo-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

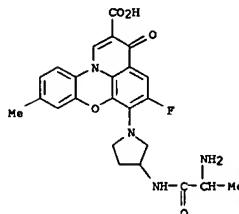
RN 155035-49-7 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[3-[(2-amino-1-oxopentyl)amino]-1-pyrrolidinyl]-5-fluoro-9-methyl-3-oxo-, monohydrochloride (9CI) (CA INDEX NAME)

L4 ANSWER 25 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



● HCl

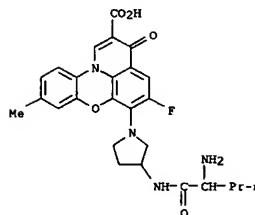
RN 155035-45-3 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[3-[(2-amino-1-oxopropyl)amino]-1-pyrrolidinyl]-5-fluoro-9-methyl-3-oxo-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

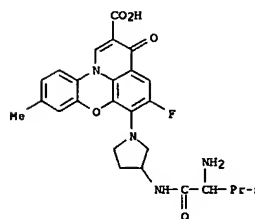
RN 155035-46-4 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[3-[(2-amino-1-oxopropyl)amino]-1-pyrrolidinyl]-5-fluoro-9-methyl-3-oxo-, monohydrochloride (9CI) (CA INDEX NAME)

L4 ANSWER 25 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



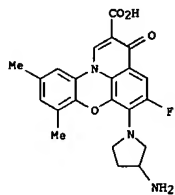
● HCl

RN 155035-50-0 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[3-[(2-amino-1-oxopentyl)amino]-1-pyrrolidinyl]-5-fluoro-9-methyl-3-oxo-, monohydrochloride (9CI) (CA INDEX NAME)



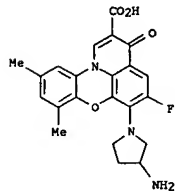
RN 155035-52-2 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[3-[(2-amino-1-pyrrolidinyl)-5-fluoro-8,10-dimethyl-3-oxo-, monohydrochloride (9CI) (CA INDEX NAME)

L4 ANSWER 25 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



● HCl

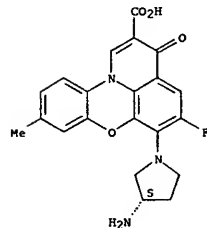
RN 155035-53-3 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-((3S)-3-amino-1-pyrrolidinyl)-5-fluoro-8,10-dimethyl-3-oxo- (9CI) (CA INDEX NAME)



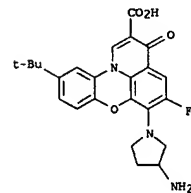
RN 155035-57-7 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-((3S)-3-amino-1-pyrrolidinyl)-5-fluoro-3-oxo- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L4 ANSWER 25 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



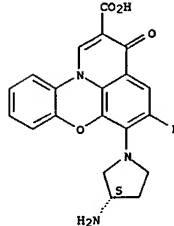
RN 155035-65-7 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-((3S)-3-amino-1-pyrrolidinyl)-10-(1,1-dimethylethyl)-5-fluoro-3-oxo-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

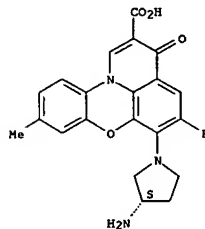
RN 155035-66-8 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-((3S)-3-amino-1-pyrrolidinyl)-10-(1,1-dimethylethyl)-5-fluoro-3-oxo- (9CI) (CA INDEX NAME)

L4 ANSWER 25 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



RN 155035-59-9 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-((3S)-3-amino-1-pyrrolidinyl)-5-fluoro-9-methyl-3-oxo-, monohydrochloride, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

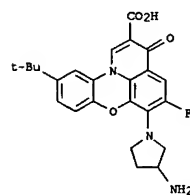


● HCl

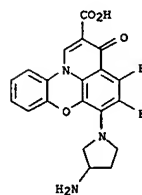
RN 155035-60-2 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-((3S)-3-amino-1-pyrrolidinyl)-5-fluoro-9-methyl-3-oxo-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L4 ANSWER 25 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



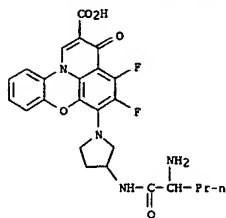
RN 155035-69-1 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-((3S)-3-amino-1-pyrrolidinyl)-4,5-difluoro-3-oxo- (9CI) (CA INDEX NAME)



RN 155035-71-5 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[[3-((2-amino-1-oxopentyl)amino)-1-pyrrolidinyl]-4,5-difluoro-3-oxo- (9CI) (CA INDEX NAME)

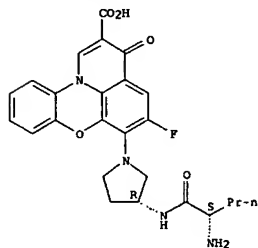


L4 ANSWER 25 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



RN 155035-72-6 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[3-[(2-amino-1-oxopentyl)amino]-1-pyrrolidinyl]-5-fluoro-3-oxo-, monohydrochloride, [R-(R\*,S\*)]- (9CI) (CA INDEX NAME)

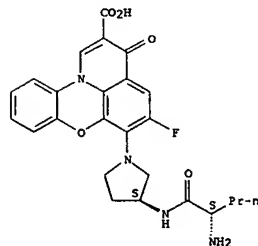
Absolute stereochemistry.



RN 155035-73-7 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[3-[(2-amino-1-oxopentyl)amino]-1-pyrrolidinyl]-5-fluoro-3-oxo-, [R-(R\*,S\*)]- (9CI) (CA INDEX NAME)

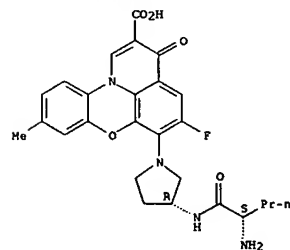
Absolute stereochemistry.

L4 ANSWER 25 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



RN 155035-76-0 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[3-[(2-amino-1-oxopentyl)amino]-1-pyrrolidinyl]-5-fluoro-9-methyl-3-oxo-, monohydrochloride, [R-(R\*,S\*)]- (9CI) (CA INDEX NAME)

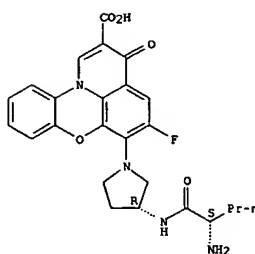
Absolute stereochemistry.



RN 155035-77-1 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[3-[(2-amino-1-oxopentyl)amino]-1-pyrrolidinyl]-5-fluoro-9-methyl-3-oxo-, [R-(R\*,S\*)]- (9CI) (CA INDEX NAME)

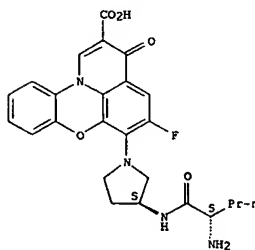
Absolute stereochemistry.

L4 ANSWER 25 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



RN 155035-74-8 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[3-[(2-amino-1-oxopentyl)amino]-1-pyrrolidinyl]-5-fluoro-3-oxo-, monohydrochloride, [S-(R\*,R')]- (9CI) (CA INDEX NAME)

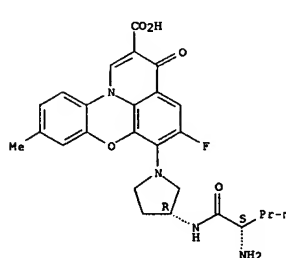
Absolute stereochemistry.



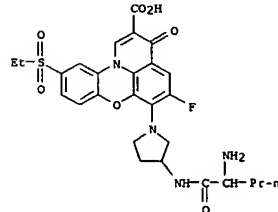
RN 155035-75-9 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[3-[(2-amino-1-oxopentyl)amino]-1-pyrrolidinyl]-5-fluoro-3-oxo-, [S-(R\*,R')]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L4 ANSWER 25 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

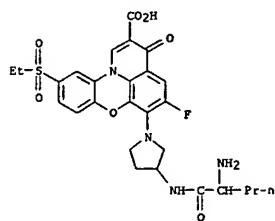


RN 155035-83-9 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[3-[(2-amino-1-oxopentyl)amino]-1-pyrrolidinyl]-10-(ethylsulfonyl)-5-fluoro-3-oxo-, monohydrochloride (9CI) (CA INDEX NAME)



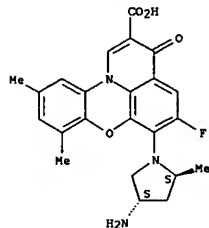
RN 155035-84-0 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[3-[(2-amino-1-oxopentyl)amino]-1-pyrrolidinyl]-10-(ethylsulfonyl)-5-fluoro-3-oxo-, monohydrochloride (9CI) (CA INDEX NAME)

L4 ANSWER 25 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



RN 155035-86-2 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-(4-amino-2-methyl-1-pyrrolidinyl)-5-fluoro-8,10-dimethyl-3-oxo-, monohydrochloride, (3S-trans)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

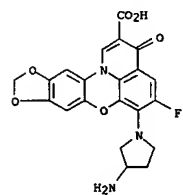


● HCl

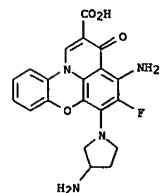
RN 155035-87-3 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-(4-amino-2-methyl-1-pyrrolidinyl)-5-fluoro-8,10-dimethyl-3-oxo-, (3S-trans)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L4 ANSWER 25 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



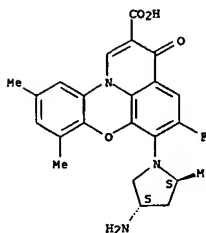
RN 155035-94-2 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 4-amino-6-(3-amino-1-pyrrolidinyl)-5-fluoro-3-oxo- (9CI) (CA INDEX NAME)



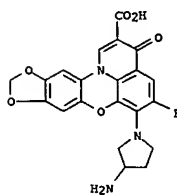
RN 155036-02-5 CAPLUS  
 CN L-Alaninamide, L-alanyl-N-[1-(2-carboxy-5-fluoro-3-oxo-3H-pyrido[3,2,1-k]phenoxazin-6-yl)-3-pyrrolidinyl]-, monohydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L4 ANSWER 25 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



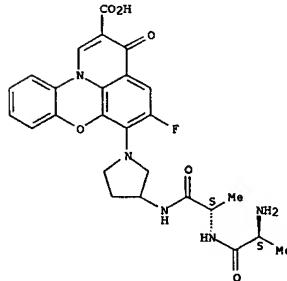
RN 155035-90-8 CAPLUS  
 CN 3H-[1,3]Dioxolo[4,5-b]pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-(3-amino-1-pyrrolidinyl)-5-fluoro-3-oxo-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

RN 155035-91-9 CAPLUS  
 CN 3H-[1,3]Dioxolo[4,5-b]pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-(3-amino-1-pyrrolidinyl)-5-fluoro-3-oxo- (9CI) (CA INDEX NAME)

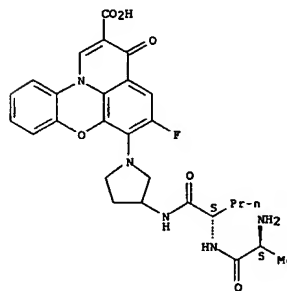
L4 ANSWER 25 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



● HCl

RN 155036-08-1 CAPLUS  
 CN L-Norvalinamide, L-alanyl-N-[1-(2-carboxy-5-fluoro-3-oxo-3H-pyrido[3,2,1-k]phenoxazin-6-yl)-3-pyrrolidinyl]-, monohydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.

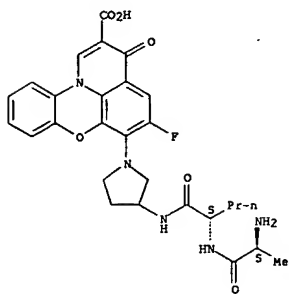


● HCl

RN 155036-09-2 CAPLUS  
 CN L-Norvalinamide, L-alanyl-N-[1-(2-carboxy-5-fluoro-3-oxo-3H-pyrido[3,2,1-k]phenoxazin-6-yl)-3-pyrrolidinyl]- (9CI) (CA INDEX NAME)

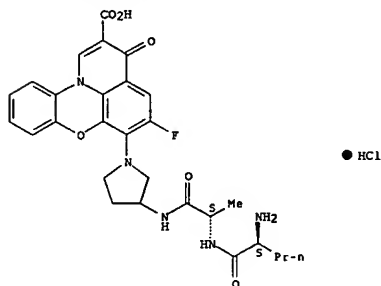
Absolute stereochemistry.

L4 ANSWER 25 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



RN 155036-11-6 CAPLUS  
 CN L-Alaninamide, L-norvalyl-N-[1-(2-carboxy-5-fluoro-3-oxo-3H-pyrido[3,2,1-k]phenoxazin-6-yl)-3-pyrrolidinyl]-, monohydrochloride (9CI) (CA INDEX NAME)

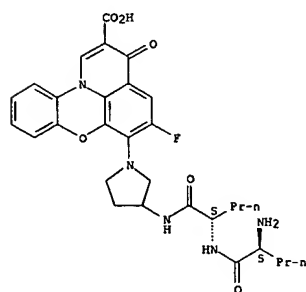
Absolute stereochemistry.



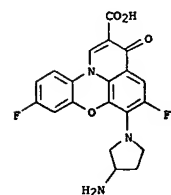
RN 155036-12-7 CAPLUS  
 CN L-Alaninamide, L-norvalyl-N-[1-(2-carboxy-5-fluoro-3-oxo-3H-pyrido[3,2,1-k]phenoxazin-6-yl)-3-pyrrolidinyl]- (9CI) (CA INDEX NAME)

L4 ANSWER 25 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

Absolute stereochemistry.



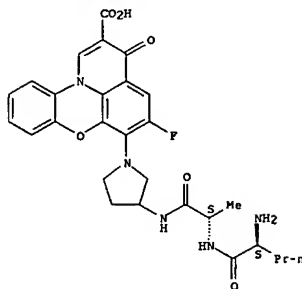
RN 155036-17-2 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[(3-amino-1-pyrrolidinyl)-5,9-difluoro-3-oxo-] (9CI) (CA INDEX NAME)



RN 155036-23-0 CAPLUS  
 CN 3H-[1,3]Dioxolo[4,5-b]pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[(3-amino-1-pyrrolidinyl)-5-fluoro-3-oxo-], ethyl ester (9CI) (CA INDEX NAME)

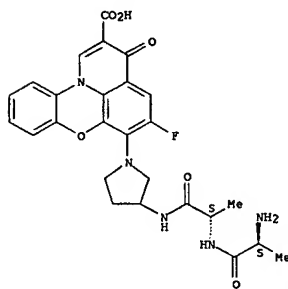
L4 ANSWER 25 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

Absolute stereochemistry.



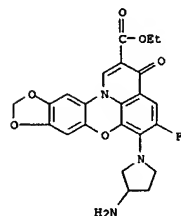
RN 155036-14-9 CAPLUS  
 CN L-Alaninamide, L-alanyl-N-[1-(2-carboxy-5-fluoro-3-oxo-3H-pyrido[3,2,1-k]phenoxazin-6-yl)-3-pyrrolidinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



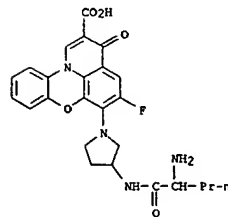
RN 155036-15-0 CAPLUS  
 CN L-Norvalinamide, L-norvalyl-N-[1-(2-carboxy-5-fluoro-3-oxo-3H-pyrido[3,2,1-k]phenoxazin-6-yl)-3-pyrrolidinyl]- (9CI) (CA INDEX NAME)

L4 ANSWER 25 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



IT 142136-44-5P 142247-50-5P 155035-44-2P  
 155035-58-8P 155035-62-4P 155035-63-5P  
 155035-79-3P 155035-80-6P  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (preparation and antineoplastic activity of, reaction of)

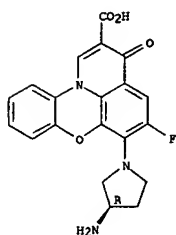
RN 142136-44-5 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[(3-amino-1-pyrrolidinyl)-5,9-difluoro-3-oxo-] (9CI) (CA INDEX NAME)



RN 142247-50-5 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[(3-amino-1-pyrrolidinyl)-5-fluoro-3-oxo-], monohydrochloride. (R)- (9CI) (CA INDEX NAME)

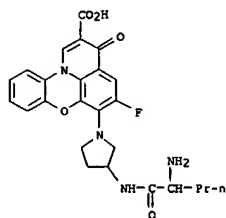
Absolute stereochemistry.

L4 ANSWER 25 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



● HCl

RN 155035-44-2 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[(2-amino-1-oxopentyl)amino]-1-pyrrolidinyl-5-fluoro-3-oxo-, monohydrochloride (9CI) (CA INDEX NAME)

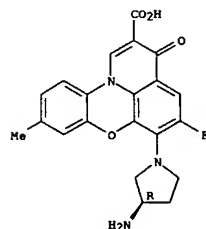


● HCl

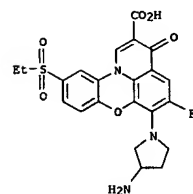
RN 155035-58-8 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[(3R)-3-amino-1-pyrrolidinyl]-5-fluoro-3-oxo- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L4 ANSWER 25 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



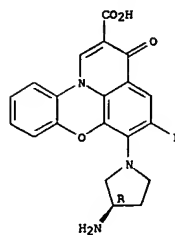
RN 155035-79-3 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[(3-amino-1-pyrrolidinyl)-10-(ethylsulfonyl)-5-fluoro-3-oxo-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

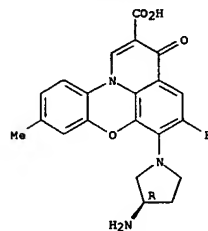
RN 155035-80-6 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[(3-amino-1-pyrrolidinyl)-10-(ethylsulfonyl)-5-fluoro-3-oxo- (9CI) (CA INDEX NAME)

L4 ANSWER 25 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



RN 155035-62-4 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[(3-amino-1-pyrrolidinyl)-5-fluoro-9-methyl-3-oxo-, monohydrochloride, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

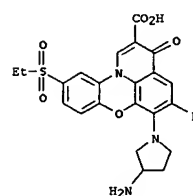


● HCl

RN 155035-63-5 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[(3-amino-1-pyrrolidinyl)-5-fluoro-9-methyl-3-oxo-, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

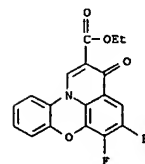
L4 ANSWER 25 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



IT 100828-10-2P 110943-87-8P 121996-62-1P  
 142136-68-3P 142136-69-4P 142136-72-9P  
 142136-73-0P 142136-74-1P 142136-81-0P  
 142136-92-1P 142136-92-3P 142136-93-4P  
 142136-94-5P 142136-95-6P 155035-40-8P  
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 155035-67-9P 155035-68-0P 155035-78-2P  
 155035-81-7P 155035-82-8P 155035-85-1P  
 155035-89-5P 155035-92-0P 155035-93-1P  
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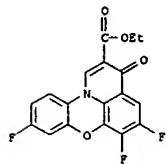
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and reaction of, in preparation of antineoplastic agents)  
 RN 100828-10-2 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 5,6-difluoro-3-oxo-, ethyl ester (9CI) (CA INDEX NAME)

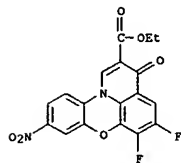


RN 110943-87-8 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 5,6,9-trifluoro-3-oxo-, ethyl ester (9CI) (CA INDEX NAME)

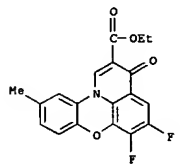
L4 ANSWER 25 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



RN 121996-62-1 CAPLUS  
CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 5,6-difluoro-9-nitro-3-oxo-, ethyl ester (9CI) (CA INDEX NAME)

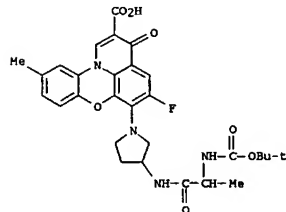


RN 142136-68-3 CAPLUS  
CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 5,6-difluoro-10-methyl-3-oxo-, ethyl ester (9CI) (CA INDEX NAME)

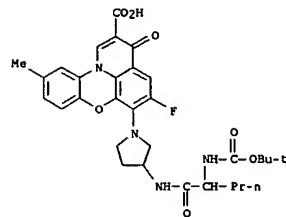


RN 142136-69-4 CAPLUS  
CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[3-(acetylamino)-1-

L4 ANSWER 25 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

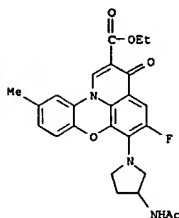


RN 142136-74-1 CAPLUS  
CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[3-[[2-[[[(1,1-dimethylethoxy)carbonyl]amino]-1-oxopentyl]amino]-1-pyrrolidinyl]-5-fluoro-10-methyl-3-oxo-, ethyl ester (9CI) (CA INDEX NAME)

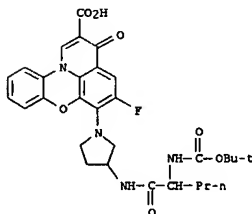


RN 142136-81-0 CAPLUS  
CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[3-[[2-[[[(1,1-dimethylethoxy)carbonyl]amino]-1-pyrrolidinyl]-5-fluoro-3-oxo-, ethyl ester, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

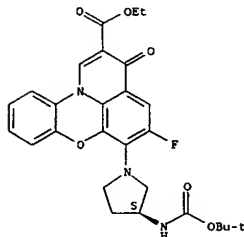
L4 ANSWER 25 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)  
pyrrolidinyl]-5-fluoro-10-methyl-3-oxo-, ethyl ester (9CI) (CA INDEX NAME)

RN 142136-72-9 CAPLUS  
CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[3-[[2-[[[(1,1-dimethylethoxy)carbonyl]amino]-1-oxopentyl]amino]-1-pyrrolidinyl]-5-fluoro-3-oxo-, ethyl ester (9CI) (CA INDEX NAME)



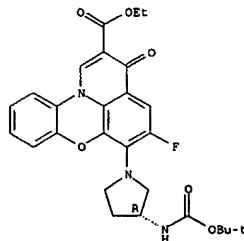
RN 142136-73-0 CAPLUS  
CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[3-[[2-[[[(1,1-dimethylethoxy)carbonyl]amino]-1-oxopentyl]amino]-1-pyrrolidinyl]-5-fluoro-10-methyl-3-oxo-, ethyl ester (9CI) (CA INDEX NAME)

L4 ANSWER 25 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



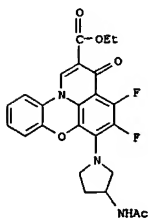
RN 142136-82-1 CAPLUS  
CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[3-[[2-[[[(1,1-dimethylethoxy)carbonyl]amino]-1-oxopentyl]amino]-1-pyrrolidinyl]-5-fluoro-3-oxo-, ethyl ester, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

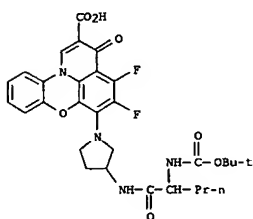


RN 142136-92-3 CAPLUS  
CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[3-(acetylamino)-1-pyrrolidinyl]-4,5-difluoro-3-oxo-, ethyl ester (9CI) (CA INDEX NAME)

L4 ANSWER 25 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



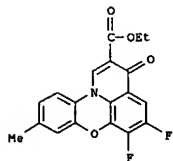
RN 142136-93-4 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[3-[[2-[[[(1,1-dimethylethoxy)carbonyl]amino]-1-oxopentyl]amino]-1-pyrrolidinyl]-4,5-difluoro-3-oxo- (9CI) (CA INDEX NAME)



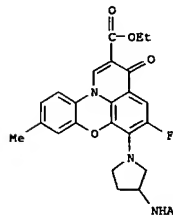
RN 142136-94-5 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[3-[[2-[[[(1,1-dimethylethoxy)carbonyl]amino]-1-oxopentyl]amino]-1-pyrrolidinyl]-5-fluoro-3-oxo-, [S-(R\*,S\*)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

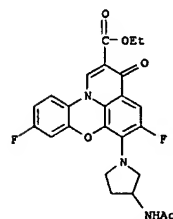
L4 ANSWER 25 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



RN 155035-41-9 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[3-(acetamino)-1-pyrrolidinyl]-5-fluoro-9-methyl-3-oxo-, ethyl ester (9CI) (CA INDEX NAME)



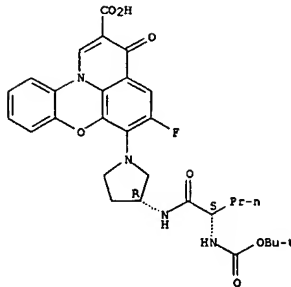
RN 155035-43-1 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[3-(acetamino)-1-pyrrolidinyl]-5,9-difluoro-3-oxo-, ethyl ester (9CI) (CA INDEX NAME)



&lt;02/09/2006&gt;

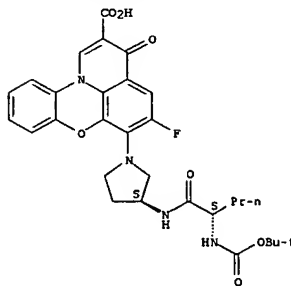
Habte

L4 ANSWER 25 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



RN 142136-95-6 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[3-[[2-[[[(1,1-dimethylethoxy)carbonyl]amino]-1-oxopentyl]amino]-1-pyrrolidinyl]-5-fluoro-3-oxo-, [S-(R\*,R\*)]- (9CI) (CA INDEX NAME)

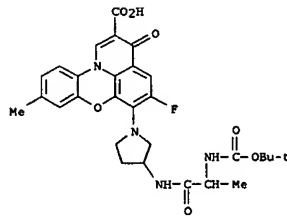
Absolute stereochemistry.



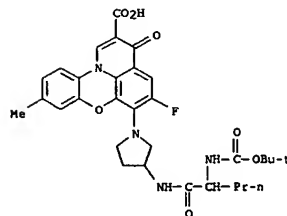
RN 155035-40-8 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 5,6-difluoro-9-methyl-3-oxo-, ethyl ester (9CI) (CA INDEX NAME)

L4 ANSWER 25 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

RN 155035-47-5 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[3-[[2-[[[(1,1-dimethylethoxy)carbonyl]amino]-1-oxopentyl]amino]-1-pyrrolidinyl]-5-fluoro-9-methyl-3-oxo- (9CI) (CA INDEX NAME)

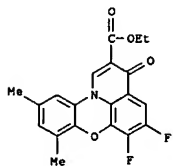


RN 155035-51-1 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[3-[[2-[[[(1,1-dimethylethoxy)carbonyl]amino]-1-oxopentyl]amino]-1-pyrrolidinyl]-5-fluoro-9-methyl-3-oxo- (9CI) (CA INDEX NAME)

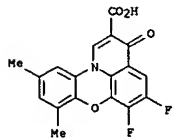


RN 155035-54-4 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 5,6-difluoro-8,10-dimethyl-3-oxo-, ethyl ester (9CI) (CA INDEX NAME)

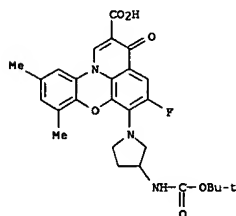
L4 ANSWER 25 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



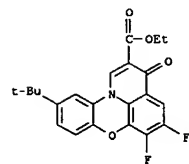
RN 155035-55-5 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 5,6-difluoro-8,10-dimethyl-3-oxo- (9CI) (CA INDEX NAME)



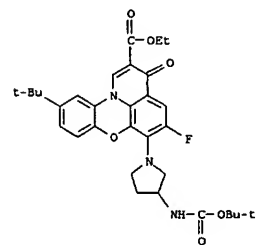
RN 155035-56-6 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-([1,1-dimethylethoxy]carbonyl)amino]-1-pyrrolidinyl]-5-fluoro-8,10-dimethyl-3-oxo- (9CI) (CA INDEX NAME)



L4 ANSWER 25 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



RN 155035-68-0 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-([1,1-dimethylethoxy]carbonyl)amino]-1-pyrrolidinyl]-10-(1,1-dimethylethyl)-5-fluoro-3-oxo-, ethyl ester (9CI) (CA INDEX NAME)



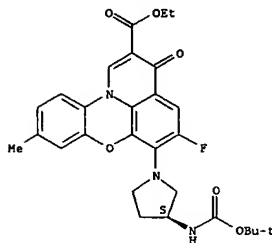
RN 155035-78-2 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-([1,1-dimethylethoxy]carbonyl)amino]-1-oxopentyl]amino]-1-pyrrolidinyl]-5-fluoro-9-methyl-3-oxo-, [5-(R\*,S\*)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L4 ANSWER 25 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

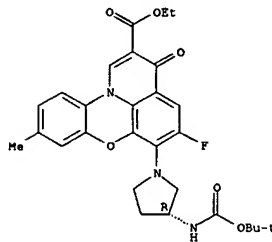
RN 155035-61-3 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-([1,1-dimethylethoxy]carbonyl)amino]-1-pyrrolidinyl]-5-fluoro-9-methyl-3-oxo-, ethyl ester, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



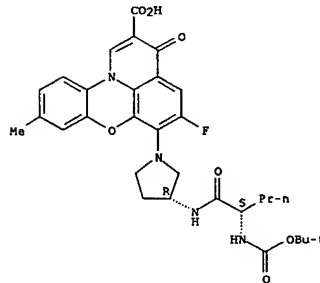
RN 155035-64-6 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-([1,1-dimethylethoxy]carbonyl)amino]-1-pyrrolidinyl]-5-fluoro-9-methyl-3-oxo-, ethyl ester, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

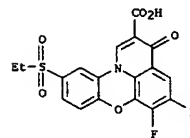


RN 155035-67-9 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 10-(1,1-dimethylethyl)-5,6-difluoro-3-oxo-, ethyl ester (9CI) (CA INDEX NAME)

L4 ANSWER 25 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

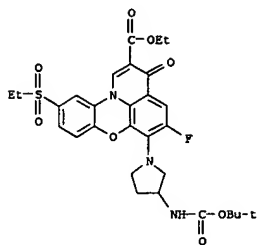


RN 155035-81-7 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 10-(ethylsulfonyl)-5,6-difluoro-3-oxo- (9CI) (CA INDEX NAME)

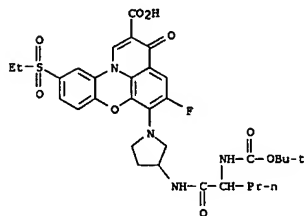


RN 155035-82-8 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-([1,1-dimethylethoxy]carbonyl)amino]-1-pyrrolidinyl]-10-(ethylsulfonyl)-5-fluoro-3-oxo-, ethyl ester (9CI) (CA INDEX NAME)

L4 ANSWER 25 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



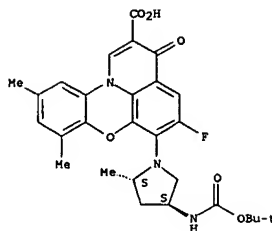
RN 155035-85-1 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[3-[[2-[[[(1,1-dimethylethoxy)carbonyl]amino]-1-oxopentyl]amino]-1-pyrrolidinyl]-10-(ethylsulfonyl)-5-fluoro-3-oxo- (9CI) (CA INDEX NAME)



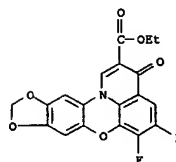
RN 155035-89-5 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[4-[[[(1,1-dimethylethoxy)carbonyl]amino]-2-methyl-1-pyrrolidinyl]-5-fluoro-8,10-dimethyl-3-oxo-, [3S-trans)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L4 ANSWER 25 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

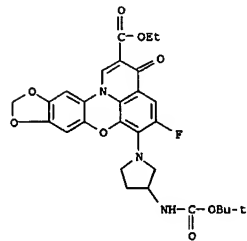


RN 155035-92-0 CAPLUS  
 CN 3H-[1,3]Dioxolo[4,5-b]pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 5,6-difluoro-3-oxo-, ethyl ester (9CI) (CA INDEX NAME)

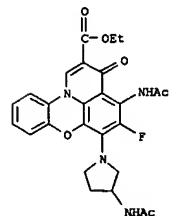


RN 155035-93-1 CAPLUS  
 CN 3H-[1,3]Dioxolo[4,5-b]pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[3-[[[(1,1-dimethylethoxy)carbonyl]amino]-1-pyrrolidinyl]-5-fluoro-3-oxo-, ethyl ester (9CI) (CA INDEX NAME)

L4 ANSWER 25 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

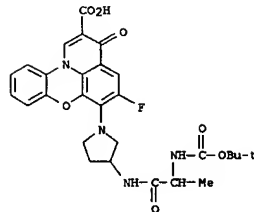


RN 155036-01-4 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 4-(acetyl-amino)-6-[3-(acetyl-amino)-1-pyrrolidinyl]-5-fluoro-3-oxo-, ethyl ester (9CI) (CA INDEX NAME)

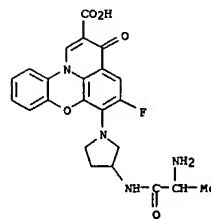


RN 155036-03-6 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[3-[[2-[[[(1,1-dimethylethoxy)carbonyl]amino]-1-oxopropyl]amino]-1-pyrrolidinyl]-5-fluoro-3-oxo- (9CI) (CA INDEX NAME)

L4 ANSWER 25 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



RN 155036-04-7 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[3-[[2-amino-1-oxopropyl]amino]-1-pyrrolidinyl]-5-fluoro-3-oxo-, monohydrochloride (9CI) (CA INDEX NAME)



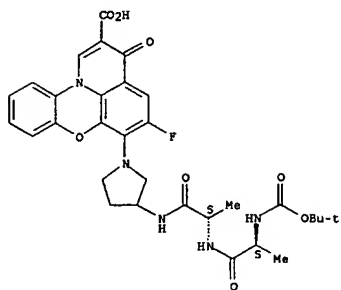
● HCl

RN 155036-05-8 CAPLUS  
 CN L-Alaninamide, N-[(1,1-dimethylethoxy)carbonyl]-1-alanyl-N-[1-(2-carboxy-5-fluoro-3-oxo-3H-pyrido[3,2,1-k]phenoxazin-6-yl)-3-pyrrolidinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

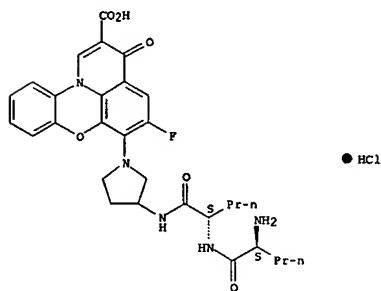


L4 ANSWER 25 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



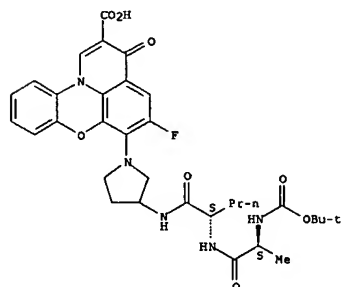
RN 155036-06-9 CAPLUS  
 CN L-Norvalinamide, L-norvalyl-N-[1-(2-carboxy-5-fluoro-3-oxo-3H-pyrido[3,2,1-kl]phenoxazin-6-yl)-3-pyrrolidinyl]-, monohydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.



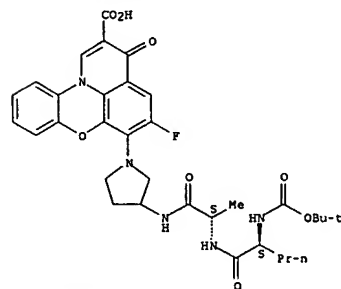
RN 155036-07-0 CAPLUS  
 CN L-Norvalinamide, N-[(1,1-dimethylethoxy)carbonyl]-L-norvalyl-N-[1-(2-

L4 ANSWER 25 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



RN 155036-13-8 CAPLUS  
 CN L-Alaninamide, N-[(1,1-dimethylethoxy)carbonyl]-L-norvalyl-N-[1-(2-carboxy-5-fluoro-3-oxo-3H-pyrido[3,2,1-kl]phenoxazin-6-yl)-3-pyrrolidinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



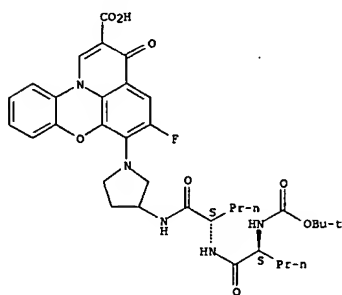
IT 111783-54-1 142247-43-6 155035-48-6  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (reaction of, in preparation of antineoplastic agents)  
 RN 111783-54-1 CAPLUS  
 CN 3H-Pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid, 6-(3-amino-1-pyrrolidinyl)-5-fluoro-3-oxo-, monohydrochloride (9CI) (CA INDEX NAME)

&lt;02/09/2006&gt;

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L4 ANSWER 25 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)  
 carboxy-5-fluoro-3-oxo-3H-pyrido[3,2,1-kl]phenoxazin-6-yl)-3-pyrrolidinyl]- (9CI) (CA INDEX NAME)

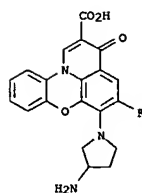
Absolute stereochemistry.



RN 155036-10-5 CAPLUS  
 CN L-Norvalinamide, N-[(1,1-dimethylethoxy)carbonyl]-L-alanyl-N-[1-(2-carboxy-5-fluoro-3-oxo-3H-pyrido[3,2,1-kl]phenoxazin-6-yl)-3-pyrrolidinyl]- (9CI) (CA INDEX NAME)

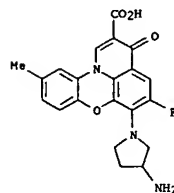
Absolute stereochemistry.

L4 ANSWER 25 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



● HCl

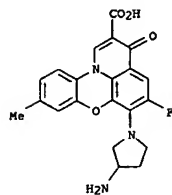
RN 142247-43-6 CAPLUS  
 CN 3H-Pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid, 6-(3-amino-1-pyrrolidinyl)-5-fluoro-10-trimethyl-3-oxo-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

RN 155035-48-6 CAPLUS  
 CN 3H-Pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid, 6-(3-amino-1-pyrrolidinyl)-5-fluoro-9-methyl-3-oxo-, monohydrochloride (9CI) (CA INDEX NAME)

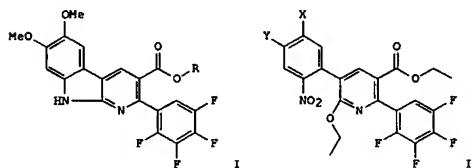
L4 ANSWER 25 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



● HCl

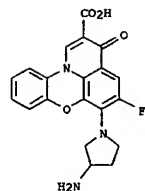
L4 ANSWER 26 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1993:671047 CAPLUS  
 DOCUMENT NUMBER: 119:271047  
 TITLE: Convenient access to 2-pyridylindole cytotoxic anticancer agents  
 AUTHOR(S): Phillips, J. G.; Chu, D.; Seif, L.; Spanton, S.; Henry, R.; Plattner, J. J.  
 CORPORATE SOURCE: Anti-infective Res. Div., Abbott Lab., Abbott Park, IL, 60064, USA  
 SOURCE: Tetrahedron Letters (1993), 34(20), 3259-62  
 CODEN: TELEAY; ISSN: 0040-4039  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 119:271047  
 GI



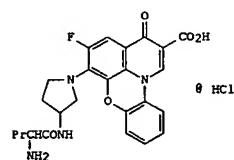
AB The regiospecific synthesis of highly substituted 2-pyridylindoles, e.g. I (R = H, Et), has been accomplished via a three step reaction sequence which involves the unique formation of the synthetically flexible pyridine intermediates II (X = OMe, Y = H, OMe; X = F, Y = H).  
 IT 111783-55-2DP, analogs  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 RN 111783-55-2 CAPLUS  
 CN 3H-Pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid, 6-(3-amino-1-pyrrolidinyl)-5-fluoro-3-oxo- (9CI) (CA INDEX NAME)

L4 ANSWER 26 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



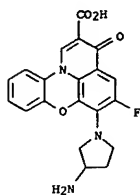
L4 ANSWER 27 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1993:420037 CAPLUS  
 DOCUMENT NUMBER: 119:20037  
 TITLE: Synthesis and antitumor activities of quinolone antineoplastic agents  
 AUTHOR(S): Chu, D. T. W.; Hallas, R.; Clement, J. J.; Alder, J. J.; McDonald, E.; Plattner, J. J.  
 CORPORATE SOURCE: Anti-Infect. Res. Div., Abbott Lab., Abbott Park, IL, 60064-3500, USA  
 SOURCE: Drugs under Experimental and Clinical Research (1992), 18(7), 275-82  
 CODEN: DECRDP; ISSN: 0378-6501  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 GI



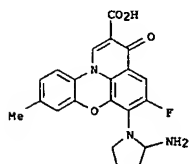
AB DNA topoisomerases, found in all prokaryotic and eukaryotic cells, play a key role in controlling the topol. state of DNA. Quinolone antibacterial agents are inhibitors of DNA gyrase, a bacterial topoisomerase II enzyme. The eukaryotic topoisomerase II is the target of various cytotoxic agents such as adriamycin and etoposide. Recently, several quinolones having C-8 fluoro and C-8 chloro substituents were shown to have cytotoxic activities and to interact with mammalian topoisomerase II. In searching for an antitumor agent of the quinolone class, several quinolones having excellent in vitro cytotoxic activity were identified. A-74932 (I) also had good activity in vivo against both systemic tumor and s.c. implanted murine solid tumors as well as human tumor xenografts.  
 IT 111783-54-1, A 62176 148201-54-1 148201-55-2  
 148201-56-3 148201-57-4 148201-58-5  
 148201-59-6 148201-60-9, A 74932 148261-20-5  
 148261-21-6  
 RL: PRP (Properties)  
 (cytotoxicity of, evaluation of)  
 RN 111783-54-1 CAPLUS  
 CN 3H-Pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid, 6-(3-amino-1-pyrrolidinyl)-5-fluoro-3-oxo-, monohydrochloride (9CI) (CA INDEX NAME)

L4 ANSWER 27 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



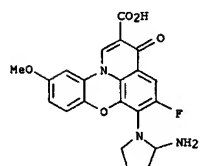
● HCl

RN 148201-54-1 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-(2-amino-1-pyrrolidinyl)-5-fluoro-9-methyl-3-oxo- (9CI) (CA INDEX NAME)

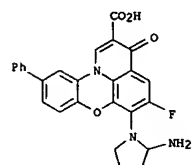


RN 148201-55-2 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-(2-amino-1-pyrrolidinyl)-5-fluoro-10-methyl-3-oxo- (9CI) (CA INDEX NAME)

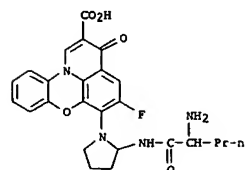
L4 ANSWER 27 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)  
 pyrrolidinyl)-5-fluoro-10-methoxy-3-oxo- (9CI) (CA INDEX NAME)



RN 148201-59-6 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-(2-amino-1-pyrrolidinyl)-5-fluoro-3-oxo-10-phenyl- (9CI) (CA INDEX NAME)



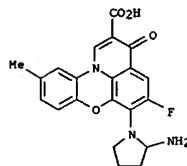
RN 148201-60-9 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[2-[(2-amino-1-oxopentyl)amino]-1-pyrrolidinyl]-5-fluoro-3-oxo-, monohydrochloride (9CI) (CA INDEX NAME)



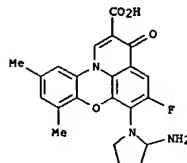
● HCl

&lt;02/09/2006&gt;

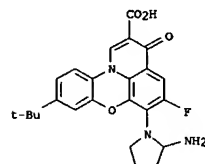
L4 ANSWER 27 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



RN 148201-56-3 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-(2-amino-1-pyrrolidinyl)-5-fluoro-8,10-dimethyl-3-oxo- (9CI) (CA INDEX NAME)



RN 148201-57-4 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-(2-amino-1-pyrrolidinyl)-9-(1,1-dimethylethyl)-5-fluoro-3-oxo- (9CI) (CA INDEX NAME)

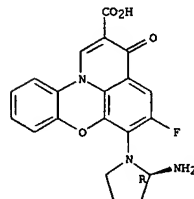


RN 148201-58-5 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-(2-amino-1-

L4 ANSWER 27 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

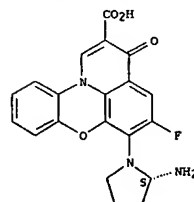
RN 148261-20-5 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-(2-amino-1-pyrrolidinyl)-5-fluoro-3-oxo-, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 148261-21-6 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-(2-amino-1-pyrrolidinyl)-5-fluoro-3-oxo-, (S)- (9CI) (CA INDEX NAME)

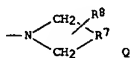
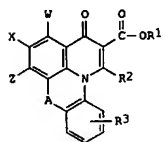
Absolute stereochemistry.



Habte

L4 ANSWER 28 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 1992:511620 CAPLUS  
 DOCUMENT NUMBER: 117:111620  
 TITLE: Preparation of 1-(aminopyrrolidin-1-yl)-2-fluoro-4-oxo-4H-quinol[2,3,4-i,j][1,4]benzoxazine-5-carboxylic acids and related compounds as antineoplastic agents  
 INVENTOR(S): Chu, Daniel T.; Plattner, Jacob J.; Hallas, Robert  
 PATENT ASSIGNEE(S): Abbott Laboratories, USA  
 SOURCE: PCT Int. Appl., 76 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 3  
 PATENT INFORMATION:

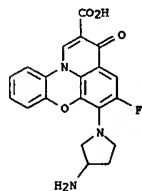
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9203136	A1	19920305	WO 1991-US6040	19910823
W: CA, JP, US				
CA 2099609	AA	19920225	CA 1991-2099609	19910823
EP 608215	A1	19940803	EP 1991-918185	19910823
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE				
PRIORITY APPLN. INFO.: US 1990-573102 A 19900824				
WO 1991-US6040 W 19910823				
OTHER SOURCE(S): MARPAT 117:111620				
GI				



AB The title compds. [I; A = O, CH<sub>2</sub>; S; R<sub>1</sub> = H, carboxy-protecting group; R<sub>2</sub> = H, Cl-6 alkyl, Cl-6 alkoxy, Cl-6 sulphydroalkyl; R<sub>3</sub> = H, halo, NO<sub>2</sub>, Cl-6 (halo)alkyl, carboxyl, OCH<sub>2</sub>O, cyano, YR<sub>4</sub>, NR<sub>5</sub>R<sub>6</sub>, etc.; Y = O, S; R<sub>4</sub>-R<sub>6</sub> = H, Cl-6 alkyl; W = H, HO, Cl-6 alkyl, amino, halo, etc.; X = H, halo, Cl-6 (halo)alkyl; Z = halo, N-containing heterocyclyl O; R<sub>7</sub> = (CH<sub>2</sub>)<sub>n</sub>, CH<sub>2</sub>CH<sub>2</sub>NCH<sub>2</sub>CH<sub>2</sub>, etc.; n = 1-3; R<sub>8</sub> = 1 or 2 groups selected from H, Cl-6 (halo)alkyl, Cl-6 aminoalkyl, etc.] or their pharmaceutically acceptable salts, esters, or amides, were prepared The coupling of 1-(3-aminopyrrolidin-1-yl)-2-fluoro-4-oxo-4H-quinol[2,3,4-i,j][1,4]benzoxazine-5-carboxylic acid hydrochloride [J. Heterocyclic Chemical 24, 453-6 (1987)] with tert-butylloxycarbonyl-L-norvaline-N-hydroxyphthalimide in DMF containing N-methylmorpholine gave 561 1-(tert-butylloxycarbonyl-L-norvalylaminopyrrolidin-1-yl) derivative which

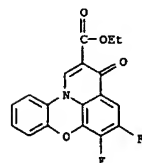
was

L4 ANSWER 28 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



● HCl

IT 100828-10-2P 110943-91-4P 142136-65-0P  
 142136-66-1P 142136-67-2P 142136-68-3P  
 142136-69-4P 142136-70-7P 142136-71-8P  
 142136-72-9P 142136-73-0P 142136-74-1P  
 142136-75-2P 142136-76-5P 142136-78-6P  
 142136-80-9P 142136-81-0P 142136-82-1P  
 142136-83-2P 142136-84-3P 142136-85-4P  
 142136-87-6P 142136-88-7P 142136-92-3P  
 142136-93-4P 142136-94-5P 142136-95-6P  
 142136-96-7P 142136-97-8P 142136-98-9P  
 142137-01-7P 142137-02-8P 142137-03-9P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation and reaction of, in preparation of antineoplastic agents)  
 RN 100828-10-2 CAPLUS  
 CN 3H-Pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid, 5,6-difluoro-3-oxo-, ethyl ester (9CI) (CA INDEX NAME)

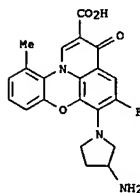


RN 110943-91-4 CAPLUS  
 CN 3H-Pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid, 5,6-difluoro-10-nitro-3-oxo-, ethyl ester (9CI) (CA INDEX NAME)

&lt;02/09/2006&gt;

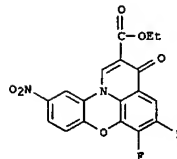
Habt

L4 ANSWER 28 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)  
 treated by HCl in AcOH to give 96% title compd. 1-(3-norvalylaminopyrrolidin-1-yl)-2-fluoro-4-oxo-4H-quinol[2,3,4-i,j][1,4]benzoxazine-5-carboxylic acid hydrochloride (II). The latter in vitro inhibited growth of, e.g., A549, HT-29, and P388-ADR tumor cells with IC<sub>50</sub> of 0.591, 0.195, and 0.394, resp., vs. 0.313, 0.285, and 2.59 for adriamycin. II at 3.9 mg/kg i.p. in mice with ascitic leukemia tumor P388 gave a percent ratio T/C = 177.3 [mean or median survival times of test (T) and control (C) mice], vs. T/C = 160 for adriamycin at 6.25 mg/kg i.p.  
 IT 142136-51-4  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (amidation of, with alanine derivative, in preparation of antineoplastic agents)  
 RN 142136-51-4 CAPLUS  
 CN 3H-Pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid, 6-(3-amino-1-pyrrolidinyl)-5-fluoro-11-methyl-3-oxo- (9CI) (CA INDEX NAME)

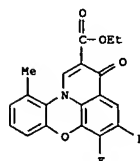


IT 111783-54-1  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (amidation of, with norvaline derivative, in preparation of antineoplastic agents)  
 RN 111783-54-1 CAPLUS  
 CN 3H-Pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid, 6-(3-amino-1-pyrrolidinyl)-5-fluoro-3-oxo-, monohydrochloride (9CI) (CA INDEX NAME)

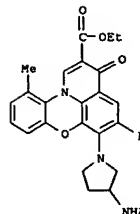
L4 ANSWER 28 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



RN 142136-65-0 CAPLUS  
 CN 3H-Pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid, 5,6-difluoro-11-methyl-3-oxo-, ethyl ester (9CI) (CA INDEX NAME)

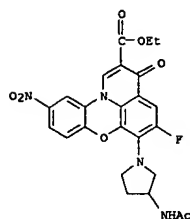


RN 142136-66-1 CAPLUS  
 CN 3H-Pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid, 6-[3-(acetylamino)-1-pyrrolidinyl]-5-fluoro-11-methyl-3-oxo-, ethyl ester (9CI) (CA INDEX NAME)

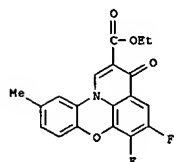


RN 142136-67-2 CAPLUS  
 CN 3H-Pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid, 6-[3-(acetylamino)-1-pyrrolidinyl]-5-fluoro-10-nitro-3-oxo-, ethyl ester (9CI) (CA INDEX NAME)

L4 ANSWER 28 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

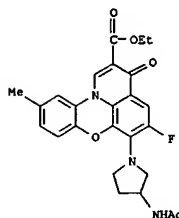


RN 142136-68-3 CAPLUS  
CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 5,6-difluoro-10-methyl-3-oxo-, ethyl ester (9CI) (CA INDEX NAME)

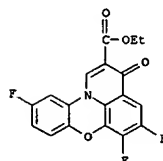


RN 142136-69-4 CAPLUS  
CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[3-(acetylamino)-1-pyrrolidinyl]-5-fluoro-10-methyl-3-oxo-, ethyl ester (9CI) (CA INDEX NAME)

L4 ANSWER 28 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

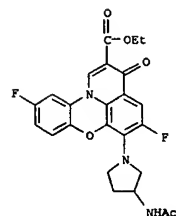


RN 142136-70-7 CAPLUS  
CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 5,6,10-trifluoro-3-oxo-, ethyl ester (9CI) (CA INDEX NAME)

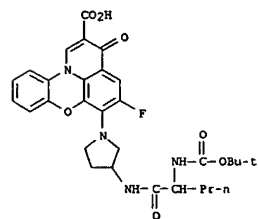


RN 142136-71-8 CAPLUS  
CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[3-(acetylamino)-1-pyrrolidinyl]-5,10-difluoro-3-oxo-, ethyl ester (9CI) (CA INDEX NAME)

L4 ANSWER 28 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

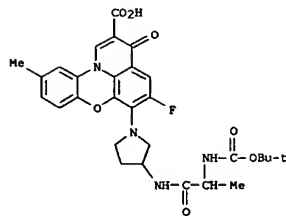


RN 142136-72-9 CAPLUS  
CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[3-[[2-[[[(1,1-dimethylethoxy)carbonyl]amino]-1-oxopentyl]amino]-1-pyrrolidinyl]-5-fluoro-3-oxo- (9CI) (CA INDEX NAME)

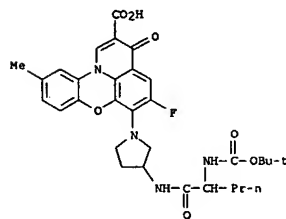


RN 142136-73-0 CAPLUS  
CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[3-[[2-[[[(1,1-dimethylethoxy)carbonyl]amino]-1-oxopentyl]amino]-1-pyrrolidinyl]-5-fluoro-10-methyl-3-oxo- (9CI) (CA INDEX NAME)

L4 ANSWER 28 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

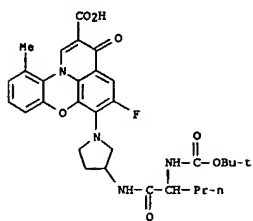


RN 142136-74-1 CAPLUS  
CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[3-[[2-[[[(1,1-dimethylethoxy)carbonyl]amino]-1-oxopentyl]amino]-1-pyrrolidinyl]-5-fluoro-10-methyl-3-oxo- (9CI) (CA INDEX NAME)

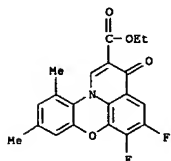


RN 142136-75-2 CAPLUS  
CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[3-[[2-[[[(1,1-dimethylethoxy)carbonyl]amino]-1-oxopentyl]amino]-1-pyrrolidinyl]-5-fluoro-11-methyl-3-oxo- (9CI) (CA INDEX NAME)

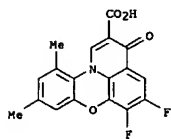
L4 ANSWER 28 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



RN 142136-78-5 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 5,6-difluoro-9,11-dimethyl-3-oxo-, ethyl ester (9CI) (CA INDEX NAME)

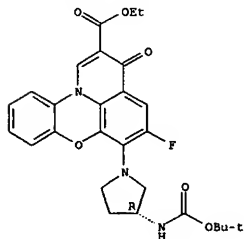


RN 142136-79-6 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 5,6-difluoro-9,11-dimethyl-3-oxo- (9CI) (CA INDEX NAME)



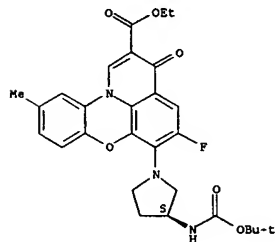
RN 142136-80-9 CAPLUS

L4 ANSWER 28 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



RN 142136-83-2 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[3-[[[(1,1-dimethylethoxy)carbonyl]amino]-1-pyrrolidinyl]-5-fluoro-10-methyl-3-oxo-, ethyl ester, (S)- (9CI) (CA INDEX NAME)

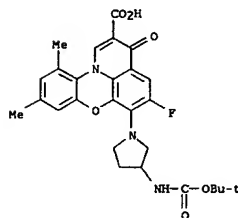
Absolute stereochemistry.



RN 142136-84-3 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[3-[[[(1,1-dimethylethoxy)carbonyl]amino]-1-pyrrolidinyl]-5-fluoro-10-methyl-3-oxo-, ethyl ester, (R)- (9CI) (CA INDEX NAME)

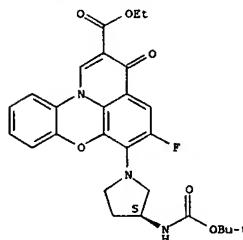
Absolute stereochemistry.

L4 ANSWER 28 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[3-[[[(1,1-dimethylethoxy)carbonyl]amino]-1-pyrrolidinyl]-5-fluoro-9,11-dimethyl-3-oxo- (9CI) (CA INDEX NAME)



RN 142136-81-0 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[3-[[[(1,1-dimethylethoxy)carbonyl]amino]-1-pyrrolidinyl]-5-fluoro-3-oxo-, ethyl ester, (S)- (9CI) (CA INDEX NAME)

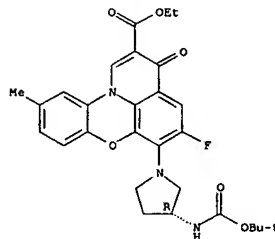
Absolute stereochemistry.



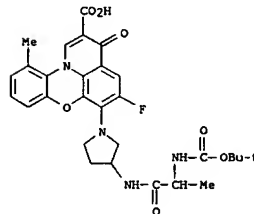
RN 142136-82-1 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[3-[[[(1,1-dimethylethoxy)carbonyl]amino]-1-pyrrolidinyl]-5-fluoro-3-oxo-, ethyl ester, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L4 ANSWER 28 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

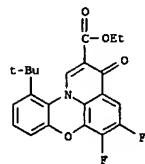


RN 142136-85-4 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[3-[[[(1,1-dimethylethoxy)carbonyl]amino]-1-oxopropyl]amino]-1-pyrrolidinyl]-5-fluoro-11-methyl-3-oxo- (9CI) (CA INDEX NAME)

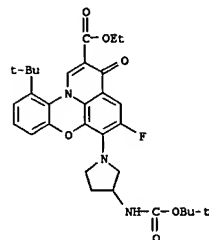


RN 142136-87-6 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 11-(1,1-dimethylethyl)-5,6-difluoro-3-oxo-, ethyl ester (9CI) (CA INDEX NAME)

L4 ANSWER 28 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

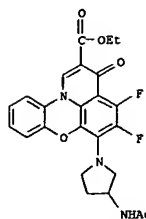


RN 142136-88-7 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[3-[[[(1,1-dimethylethoxy)carbonyl]amino]-1-pyrrolidinyl]-11-(1,1-dimethylethyl)-5-fluoro-3-oxo-, ethyl ester (9CI) (CA INDEX NAME)

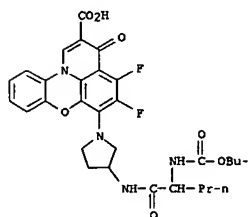


RN 142136-92-3 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[3-(acetyl-amino)-1-pyrrolidinyl]-4,5-difluoro-3-oxo-, ethyl ester (9CI) (CA INDEX NAME)

L4 ANSWER 28 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



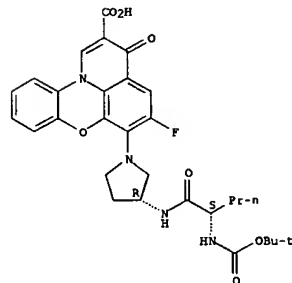
RN 142136-93-4 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[3-[[[(1,1-dimethylethoxy)carbonyl]amino]-1-oxopentyl]amino]-1-pyrrolidinyl]-4,5-difluoro-3-oxo-, ethyl ester (9CI) (CA INDEX NAME)



RN 142136-94-5 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[3-[[2-[[[(1,1-dimethylethoxy)carbonyl]amino]-1-oxopentyl]amino]-1-pyrrolidinyl]-5-fluoro-3-oxo-, [5-(R\*,R\*)]- (9CI) (CA INDEX NAME)

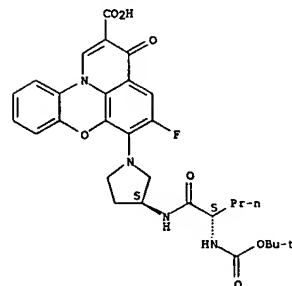
Absolute stereochemistry.

L4 ANSWER 28 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



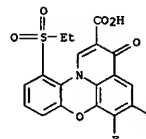
RN 142136-95-6 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[3-[[2-[[[(1,1-dimethylethoxy)carbonyl]amino]-1-oxopentyl]amino]-1-pyrrolidinyl]-5-fluoro-3-oxo-, [5-(R\*,R\*)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

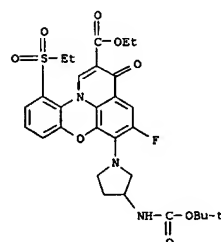


RN 142136-96-7 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 11-(ethylsulfonyl)-5,6-difluoro-3-oxo-, ethyl ester (9CI) (CA INDEX NAME)

L4 ANSWER 28 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

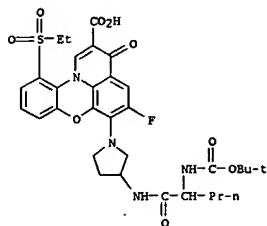


RN 142136-97-8 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[3-[[[(1,1-dimethylethoxy)carbonyl]amino]-1-pyrrolidinyl]-11-(ethylsulfonyl)-5-fluoro-3-oxo-, ethyl ester (9CI) (CA INDEX NAME)

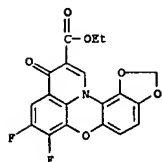


RN 142136-98-9 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[3-[[2-[[[(1,1-dimethylethoxy)carbonyl]amino]-1-oxopentyl]amino]-1-pyrrolidinyl]-11-(ethylsulfonyl)-5-fluoro-3-oxo-, ethyl ester (9CI) (CA INDEX NAME)

L4 ANSWER 28 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

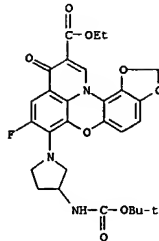


RN 142137-01-7 CAPLUS  
 CN 10H-1,3-Dioxolo[4,5-a]pyrido[3,2,1-kl]phenoxazine-11-carboxylic acid, 7,8-difluoro-10-oxo-, ethyl ester (9CI) (CA INDEX NAME)

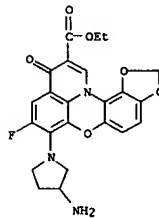


RN 142137-02-8 CAPLUS  
 CN 10H-1,3-Dioxolo[4,5-a]pyrido[3,2,1-kl]phenoxazine-11-carboxylic acid, 7-{3-[(1,1-dimethylethoxy)carbonyl]amino}-1-pyrrolidinyl}-8-fluoro-10-oxo-, ethyl ester (9CI) (CA INDEX NAME)

L4 ANSWER 28 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



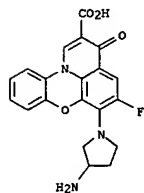
RN 142137-03-9 CAPLUS  
 CN 10H-1,3-Dioxolo[4,5-a]pyrido[3,2,1-kl]phenoxazine-11-carboxylic acid, 7-(3-amino-1-pyrrolidinyl)-8-fluoro-10-oxo-, ethyl ester (9CI) (CA INDEX NAME)



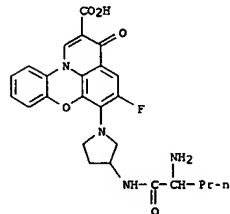
IT 111783-55-2P 142136-44-5P 142136-45-6P  
 142136-46-7P 142136-47-8P 142136-48-9P  
 142136-49-0P 142136-50-3P 142136-52-5P  
 142136-53-6P 142247-43-6P 142247-44-7P  
 142247-45-8P 142247-46-9P 142247-47-0P  
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 142247-51-6P 142247-52-7P 142247-53-8P  
 142247-54-9P 142247-55-0P 142247-56-1P  
 142247-57-2P 142247-59-4P 142247-60-7P  
 142247-62-9P 142610-37-5P  
 RL: SPN (Synthetic preparation); PREP (Preparation)

L4 ANSWER 28 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

(pcep. of, as antineoplastic agent)  
 RN 111783-55-2 CAPLUS  
 CN 3H-Pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid, 6-(3-amino-1-pyrrolidinyl)-5-fluoro-3-oxo- (9CI) (CA INDEX NAME)

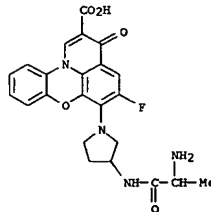


RN 142136-44-5 CAPLUS  
 CN 3H-Pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid, 6-[3-[(2-amino-1-oxopentyl)amino]-1-pyrrolidinyl]-5-fluoro-3-oxo- (9CI) (CA INDEX NAME)

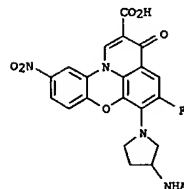


RN 142136-45-6 CAPLUS  
 CN 3H-Pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid, 6-[3-[(2-amino-1-oxopropyl)amino]-1-pyrrolidinyl]-5-fluoro-3-oxo- (9CI) (CA INDEX NAME)

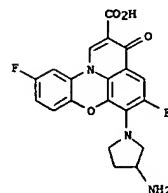
L4 ANSWER 28 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



RN 142136-46-7 CAPLUS  
 CN 3H-Pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid, 6-[3-(acetylamino)-1-pyrrolidinyl]-5-fluoro-10-nitro-3-oxo- (9CI) (CA INDEX NAME)

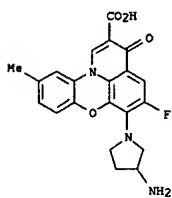


RN 142136-47-8 CAPLUS  
 CN 3H-Pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid, 6-[3-(acetylamino)-1-pyrrolidinyl]-5,10-difluoro-3-oxo- (9CI) (CA INDEX NAME)

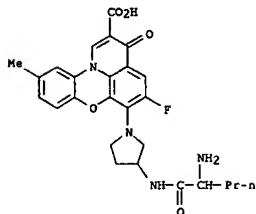




L4 ANSWER 28 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)  
 RN 142136-48-9 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[(3-amino-1-pyrrolidinyl)-5-fluoro-10-methyl-3-oxo- (9CI) (CA INDEX NAME)

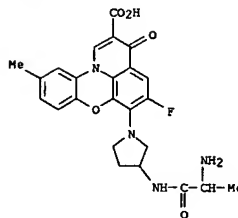


RN 142136-49-0 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[3-[(2-amino-1-oxopentyl)amino]-1-pyrrolidinyl]-5-fluoro-10-methyl-3-oxo- (9CI) (CA INDEX NAME)

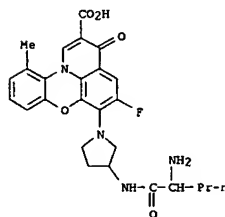


RN 142136-50-3 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[3-[(2-amino-1-oxopentyl)amino]-1-pyrrolidinyl]-5-fluoro-10-methyl-3-oxo- (9CI) (CA INDEX NAME)

L4 ANSWER 28 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

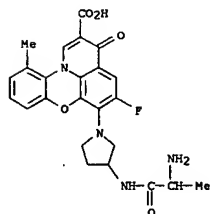


RN 142136-52-5 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[3-[(2-amino-1-oxopentyl)amino]-1-pyrrolidinyl]-5-fluoro-11-methyl-3-oxo- (9CI) (CA INDEX NAME)

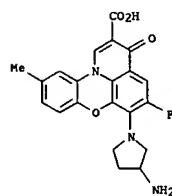


RN 142136-53-6 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[3-[(2-amino-1-oxopentyl)amino]-1-pyrrolidinyl]-5-fluoro-11-methyl-3-oxo- (9CI) (CA INDEX NAME)

L4 ANSWER 28 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



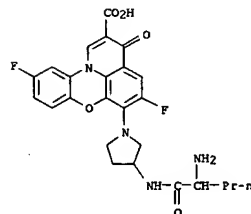
RN 142247-43-6 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-(3-amino-1-pyrrolidinyl)-5-fluoro-10-trimethyl-3-oxo-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

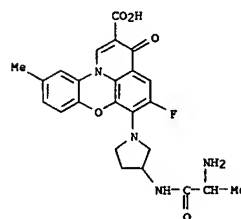
RN 142247-44-7 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[3-[(2-amino-1-oxopentyl)amino]-1-pyrrolidinyl]-5,10-difluoro-3-oxo-, monohydrochloride (9CI) (CA INDEX NAME)

L4 ANSWER 28 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



● HCl

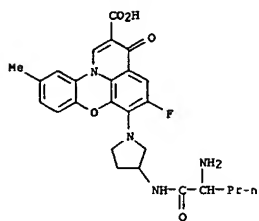
RN 142247-45-8 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[3-[(2-amino-1-oxopentyl)amino]-1-pyrrolidinyl]-5-fluoro-10-methyl-3-oxo-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

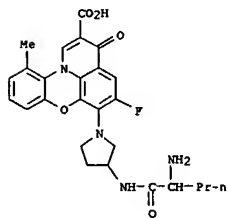
RN 142247-46-9 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[3-[(2-amino-1-oxopentyl)amino]-1-pyrrolidinyl]-5-fluoro-10-methyl-3-oxo-, monohydrochloride (9CI) (CA INDEX NAME)

L4 ANSWER 28 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



● HCl

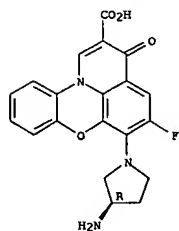
RN 142247-47-0 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[3-[(2-amino-1-oxopentyl)amino]-1-pyrrolidinyl]-5-fluoro-11-methyl-3-oxo-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

RN 142247-48-1 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[3-[(2-amino-1-pyrrolidinyl)amino]-5-fluoro-9,11-dimethyl-3-oxo-, monohydrochloride (9CI) (CA INDEX NAME)

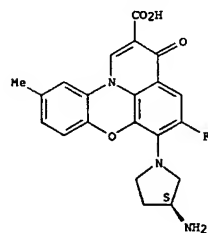
L4 ANSWER 28 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



● HCl

RN 142247-51-6 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[3-[(2-amino-1-pyrrolidinyl)amino]-5-fluoro-10-methyl-3-oxo-, monohydrochloride, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



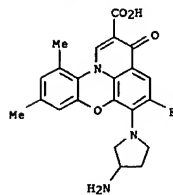
● HCl

RN 142247-52-7 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[3-[(2-amino-1-pyrrolidinyl)amino]-5-fluoro-10-methyl-3-oxo-, monohydrochloride, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

&lt;02/09/2006&gt;

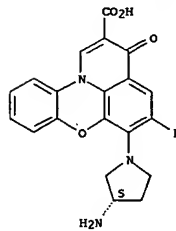
L4 ANSWER 28 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



● HCl

RN 142247-49-2 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[3-[(2-amino-1-pyrrolidinyl)amino]-5-fluoro-3-oxo-, monohydrochloride, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

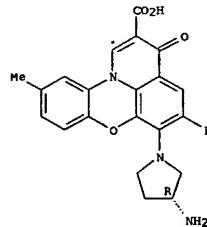


● HCl

RN 142247-50-5 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[3-[(2-amino-1-pyrrolidinyl)amino]-5-fluoro-3-oxo-, monohydrochloride, (R)- (9CI) (CA INDEX NAME)

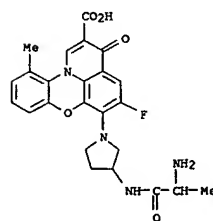
Absolute stereochemistry.

L4 ANSWER 28 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



● HCl

RN 142247-53-8 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[3-[(2-amino-1-oxopropyl)amino]-1-pyrrolidinyl]-5-fluoro-11-methyl-3-oxo-, monohydrochloride (9CI) (CA INDEX NAME)

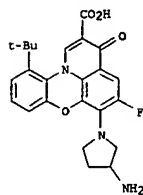


● HCl

RN 142247-54-9 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[3-[(2-amino-1-pyrrolidinyl)amino]-11-(1,1-dimethylethyl)-5-fluoro-3-oxo-, monohydrochloride (9CI) (CA INDEX NAME)

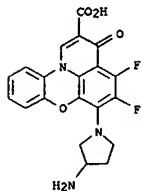
Habte

L4 ANSWER 28 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



● HCl

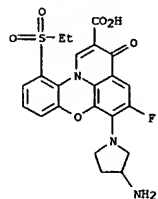
RN 142247-55-0 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-(3-amino-1-pyrrolidinyl)-4,5-difluoro-3-oxo-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

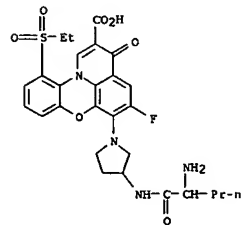
RN 142247-56-1 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[3-[(2-amino-1-oxopentyl)amino]-1-pyrrolidinyl]-4,5-difluoro-3-oxo-, monohydrochloride (9CI) (CA INDEX NAME)

L4 ANSWER 28 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



● HCl

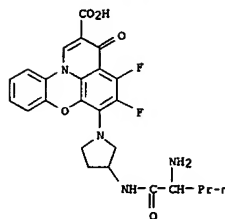
RN 142247-60-7 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[3-[(2-amino-1-oxopentyl)amino]-1-pyrrolidinyl]-11-(ethylsulfonyl)-5-fluoro-3-oxo-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

RN 142247-62-9 CAPLUS  
 CN 10H-1,3-Dioxolo[4,5-a]pyrido[3,2,1-k]phenoxazine-11-carboxylic acid, 7-(3-amino-1-pyrrolidinyl)-8-fluoro-10-oxo-, monohydrochloride (9CI) (CA INDEX NAME)

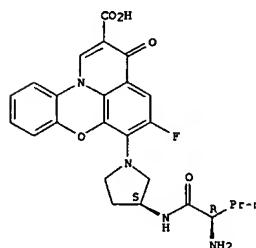
L4 ANSWER 28 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



● HCl

RN 142247-57-2 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[3-[(2-amino-1-oxopentyl)amino]-1-pyrrolidinyl]-5-fluoro-3-oxo-, monohydrochloride, [S-(R\*,S\*)]- (9CI) (CA INDEX NAME)

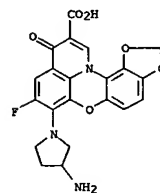
Absolute stereochemistry.



● HCl

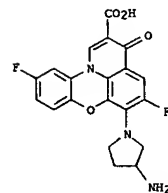
RN 142247-59-4 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-(3-amino-1-pyrrolidinyl)-11-(ethylsulfonyl)-5-fluoro-3-oxo-, monohydrochloride (9CI) (CA INDEX NAME)

L4 ANSWER 28 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



● HCl

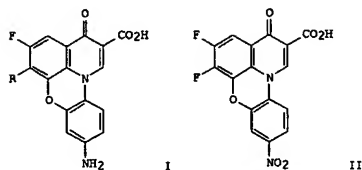
RN 142610-37-5 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-(3-amino-1-pyrrolidinyl)-5,10-difluoro-3-oxo-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

L4 ANSWER 29 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 1991:492282 CAPLUS  
 DOCUMENT NUMBER: 115:92282  
 TITLE: Preparation of 9-amino-5-fluoro-3-oxo-3H-pyrido[3,2,1-kl]phenoxazine-2-carboxylic acids as medical bactericides  
 INVENTOR(S): Radl, Stanislav; Holá, Vladislava  
 PATENT ASSIGNEE(S): Czech.  
 SOURCE: Czech., 3 pp.  
 CODEN: CZXXA9  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Czech  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CS 264936	B1	19890912	CS 1988-1615	19880311
PRIORITY APPLN. INFO.:			CS 1988-1615	19880311
OTHER SOURCE(S):		MARPAT 115:92282		
GI				



AB The title compds. (I: R = piperazino, 4-methylpiperazino) were prepared by reduction of 5,6-difluoro-9-nitro analog with FeSO<sub>4</sub> in an alkaline environment, and amination with the appropriate heterocyclic base. A suspension of 1.1 g II in a solution of 4 g NaOH in 150 mL H<sub>2</sub>O was refluxed 0.5 h, treated by

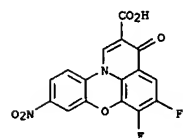
a solution of 10 g FeSO<sub>4</sub>·7H<sub>2</sub>O in 50 mL H<sub>2</sub>O, and the mixture refluxed 0.5 h to give 0.35 g 9-amino analog I (R = F), which (0.33 g) was stirred 20 h with 0.5 g N-methylpiperazine in pyridine under Ar to give 0.25 g title compound (I: R = 4-methylpiperazino) which in vitro inhibited (activity in parentheses expressed in mg/mL), e.g., *Streptococcus pyogenes* (1), *Staphylococcus aureus* (16), *Pseudomonas aeruginosa* (64), etc.

IT 121996-68-7P 121996-69-8P 135472-99-0P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of, as medical bactericide)

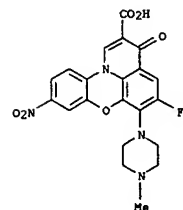
RN 121996-68-7 CAPLUS  
 CN 3H-Pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid, 9-amino-5,6-difluoro-3-oxo- (9CI) (CA INDEX NAME)

L4 ANSWER 29 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

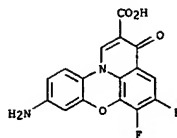
IT 121996-65-4 121996-67-6  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (reduction of, by iron sulfate, in preparation of medical bactericide)  
 RN 121996-65-4 CAPLUS  
 CN 3H-Pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid, 5,6-difluoro-9-nitro-3-oxo- (9CI) (CA INDEX NAME)



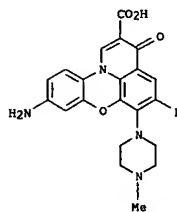
RN 121996-67-6 CAPLUS  
 CN 3H-Pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid, 5-fluoro-6-(4-methyl-1-piperazinyl)-9-nitro-3-oxo- (9CI) (CA INDEX NAME)



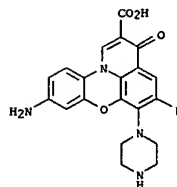
L4 ANSWER 29 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



RN 121996-69-8 CAPLUS  
 CN 3H-Pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid, 9-amino-5-fluoro-6-(4-methyl-1-piperazinyl)-3-oxo- (9CI) (CA INDEX NAME)

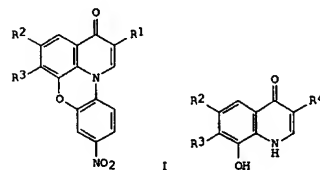


RN 135472-99-0 CAPLUS  
 CN 3H-Pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid, 9-amino-5-fluoro-3-oxo-6-(1-piperazinyl)- (9CI) (CA INDEX NAME)



L4 ANSWER 30 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 1990:198398 CAPLUS  
 DOCUMENT NUMBER: 112:198398  
 TITLE: Preparation of 10-nitro-4-oxo-4H-quinol[2,3,4-i,j]1,4-benzoxazine derivatives as bactericides  
 INVENTOR(S): Zikan, Viktor; Radl, Stanislav  
 PATENT ASSIGNEE(S): Czech.  
 SOURCE: Czech., 4 pp.  
 CODEN: CZXXA9  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Czech  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CS 261338	B1	19890112	CS 1987-6724	19870917
PRIORITY APPLN. INFO.:			CS 1987-6724	19870917
OTHER SOURCE(S):		CASREACT 112:198398; MARPAT 112:198398		
GI				



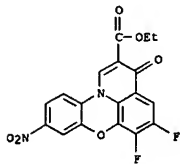
AB The title compds. [I: R<sub>1</sub> = CO<sub>2</sub>H, MeCO, (Cl-4 alkoxy-carbonyl; R<sub>2</sub>, R<sub>3</sub> = H, halo] were prepared as bactericides (no data) by cyclocondensation of hydroxy(oxo)quinolines II [R<sub>4</sub> = MeCO, Cl-4 alkoxy-carbonyl] with 2,4-(NO<sub>2</sub>)C<sub>6</sub>H<sub>3</sub> (X = Cl, F) in the presence of a base. Thus, a mixt of 2.32 g Et 1,4-dihydro-8-hydroxy-4-oxo-3-carboxylate and 0.33 g of 80% NaH in 20 mL DMF was stirred 1 h at room temperature and treated with 1.9 g 2,4-(O<sub>2</sub>N)C<sub>6</sub>H<sub>3</sub>F in 10 mL DMF. The mixture was stirred 1 h at room temperature and

refluxed 4 h to give 0.33 g I (R<sub>1</sub> = CO<sub>2</sub>Et, R<sub>2</sub>, R<sub>3</sub> = H).

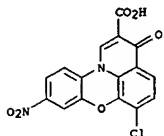
IT 121996-62-1P 121996-64-3P 121996-65-4P  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (preparation of, as bactericide)

RN 121996-62-1 CAPLUS  
 CN 3H-Pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid, 5,6-difluoro-9-nitro-3-oxo-, ethyl ester (9CI) (CA INDEX NAME)

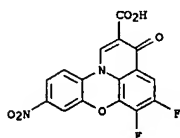
L4 ANSWER 30 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



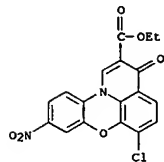
RN 121996-64-3 CAPLUS  
CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-chloro-9-nitro-3-oxo- (9CI) (CA INDEX NAME)



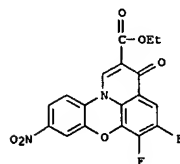
RN 121996-65-4 CAPLUS  
CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 5,6-difluoro-9-nitro-3-oxo- (9CI) (CA INDEX NAME)



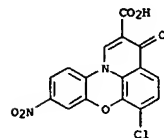
L4 ANSWER 31 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



RN 121996-62-1 CAPLUS  
CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 5,6-difluoro-9-nitro-3-oxo-, ethyl ester (9CI) (CA INDEX NAME)



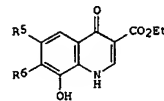
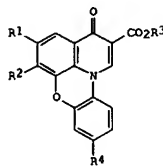
RN 121996-64-3 CAPLUS  
CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-chloro-9-nitro-3-oxo- (9CI) (CA INDEX NAME)



RN 121996-65-4 CAPLUS  
CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 5,6-difluoro-9-nitro-3-oxo- (9CI) (CA INDEX NAME)

L4 ANSWER 31 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1989:477939 CAPLUS  
DOCUMENT NUMBER: 111:77939  
TITLE: Synthesis and antimicrobial activity of some 3-oxo-3H-pyrido[3,2,1-k]phenoxazine-2-carboxylic acids  
AUTHOR(S): Radl, Stanislav; Zikan, Viktor  
CORPORATE SOURCE: Res. Inst. Pharm. Biochem., Prague, 130 60, Czech. Collection of Czechoslovak Chemical Communications (1989), 54(2), 506-15  
CODEN: CCCCAC; ISSN: 0010-0765  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
OTHER SOURCE(S): CASREACT 111:77939  
GI

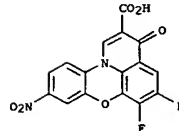


AB The title compds. I (R1 = H, F, NO2; R2 = H, Cl, F, 4-methyl-1-piperazinyl; R3 = H, Et; R4 = NO2, NH2) were prepared from hydroxyquinolines II (R5 = H, F; R6 = H, Cl, F). I showed poor antimicrobial activity.

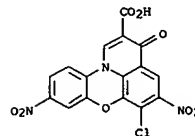
IT 121996-61-0P 121996-62-1P 121996-64-3P  
121996-65-4P 121996-66-5P 121996-67-6P  
121996-68-7P 121996-69-8P  
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study), unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)  
(preparation and bactericidal activity of)

RN 121996-61-0 CAPLUS  
CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-chloro-9-nitro-3-oxo-, ethyl ester (9CI) (CA INDEX NAME)

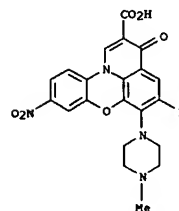
L4 ANSWER 31 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



RN 121996-66-5 CAPLUS  
CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-chloro-5,9-dinitro-3-oxo- (9CI) (CA INDEX NAME)

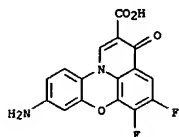


RN 121996-67-6 CAPLUS  
CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 5-fluoro-6-(4-methyl-1-piperazinyl)-9-nitro-3-oxo- (9CI) (CA INDEX NAME)

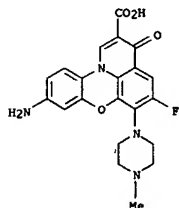


RN 121996-68-7 CAPLUS  
CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 9-amino-5,6-difluoro-3-oxo- (9CI) (CA INDEX NAME)

L4 ANSWER 31 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

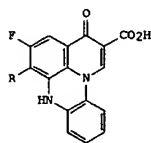


RN 121996-69-8 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 9-amino-5-fluoro-6-(4-methyl-1-piperazinyl)-3-oxo- (9CI) (CA INDEX NAME)



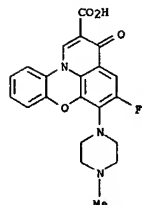
L4 ANSWER 32 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1988:590368 CAPLUS  
 DOCUMENT NUMBER: 109:190368  
 TITLE: Synthesis of 4,12-dihydro-4-oxoquino[1,8a,8-b]quinowaline-5-carboxylic acid derivatives  
 AUTHOR(S): Chu, Daniel T. W.; Maleczka, Robert E., Jr.; Nordeen, Carl W.  
 CORPORATE SOURCE: Anti-Infective Res. Div., Abbott Lab., Abbott Park, IL, 60064, USA  
 SOURCE: Journal of Heterocyclic Chemistry (1988), 25(3), 927-30  
 CODEN: JHTCAD; ISSN: 0022-152X  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 109:190368  
 GI



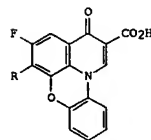
AB The synthesis and antibacterial activity of title compds. I (R = 3-amino-1-pyrrolidinyl, 4-methyl-1-piperazinyl) are described. The synthetic route includes a carbon homologation and 2 intramol. nucleophilic displacement cyclizations.  
 IT 111783-52-9  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study) (antibacterial activity of)  
 RN 111783-52-9 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 5-fluoro-6-(4-methyl-1-piperazinyl)-3-oxo- (9CI) (CA INDEX NAME)

L4 ANSWER 32 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



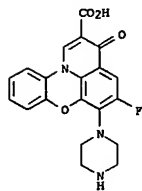
L4 ANSWER 33 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1988:5940 CAPLUS  
 DOCUMENT NUMBER: 108:5940  
 TITLE: Synthesis of 4-oxo-4H-quinol[2,3,4-i,j][1,4]benoxazine-5-carboxylic acid derivatives  
 AUTHOR(S): Chu, Daniel T. W.; Maleczka, Robert E., Jr.  
 CORPORATE SOURCE: Anti-Infect. Res. Div., Abbott Lab., North Chicago, IL, 60064, USA  
 SOURCE: Journal of Heterocyclic Chemistry (1987), 24(2), 453-6  
 CODEN: JHTCAD; ISSN: 0022-152X  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 108:5940  
 GI

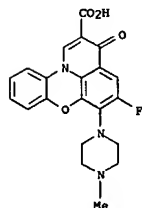


AB The synthesis and antibacterial activity of quinobenoxazine-5-carboxylic acids I (R = piperazinyl, 4-methylpiperazinyl, 3-methylpyrrolidinyl) is described. Key steps in the synthesis include carbon homologation and two intramol. nucleophilic displacement cyclization reactions to generate the 4-oxo-4H-quinol[2,3,4-i,j][1,4]benoxazine-5-carboxylic acid nucleus. I showed good broad spectrum antibacterial activity against 5 gram-pos. and 6 gram-neg. bacteria, but they are slightly less potent than their uncyclized arylquinolone analog.  
 IT 100828-12-4P 111783-52-9P 111783-54-1P  
 111783-55-2P  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation) (preparation and antibacterial activity of)  
 RN 100828-12-4 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 5-fluoro-3-oxo-6-(1-piperazinyl)- (9CI) (CA INDEX NAME)

L4 ANSWER 33 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

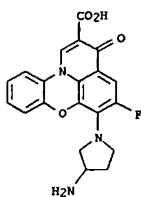


RN 111783-52-9 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 5-fluoro-6-(4-methyl-1-piperazinyl)-3-oxo- (9CI) (CA INDEX NAME)



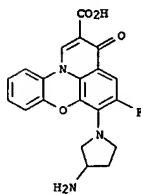
RN 111783-54-1 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-(3-amino-1-pyrrolidinyl)-5-fluoro-3-oxo-, monohydrochloride (9CI) (CA INDEX NAME)

L4 ANSWER 33 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



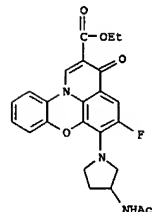
● HCl

RN 111783-55-2 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-(3-amino-1-pyrrolidinyl)-5-fluoro-3-oxo- (9CI) (CA INDEX NAME)

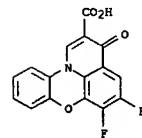


IT 111783-53-0P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation and hydrolysis of)  
 RN 111783-53-0 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-(3-(acetylamino)-1-pyrrolidinyl)-5-fluoro-3-oxo-, ethyl ester (9CI) (CA INDEX NAME)

L4 ANSWER 33 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

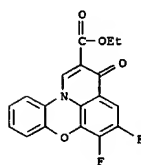


IT 100828-11-3P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation and reaction of, with piperazine)  
 RN 100828-11-3 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 5,6-difluoro-3-oxo- (9CI) (CA INDEX NAME)



IT 100828-10-2P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation and reactions of)  
 RN 100828-10-2 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 5,6-difluoro-3-oxo-, ethyl ester (9CI) (CA INDEX NAME)

L4 ANSWER 33 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

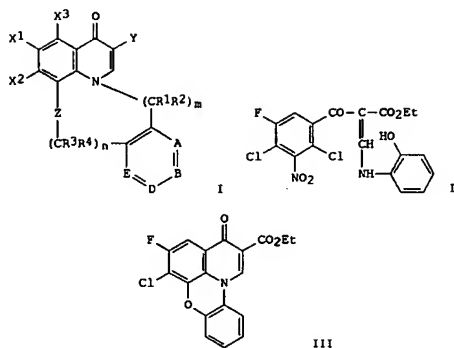


L4 ANSWER 34 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 1997:598345 CAPLUS  
 DOCUMENT NUMBER: 107:198345  
 TITLE: Preparation of 1,8-bridged 4-quinolone-3-carboxylates as bactericides  
 INVENTOR(S): Schriever, Michael; Grohe, Klaus; Zeiler, Hans  
 Joachim; Metzger, Karl Georg  
 PATENT ASSIGNEE(S): Bayer A.-G., Fed. Rep. Ger.  
 SOURCE: Ger. Offen., 18 pp.  
 CODEN: GWGXBX  
 DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 3600891	A1	19870716	DE 1986-3600891	19860115
EP 229635	A2	19870722	EP 1987-100133	19870108
EP 229635	A3	19880831		
R: AT, BE, CH, DE, ES, FR, GB, IT, LI, NL, SE				
US 4725595	A	19880216	US 1987-1318	19870108
JP 62175482	A2	19870801	JP 1987-3408	19870112
US 4841059	A	19890620	US 1987-108839	19871015
US 4902795	A	19900220	US 1988-272619	19881117
US 4977263	A	19901211	US 1989-412975	19890925
PRIORITY APPLN. INFO.:			DE 1986-3600891	A 19860115
			US 1987-1318	A3 19870108
			US 1987-108839	A3 19871015
			US 1988-272619	A3 19881117

OTHER SOURCE(S): CASREACT 107:198345; MARPAT 107:198345  
 GI

L4 ANSWER 34 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

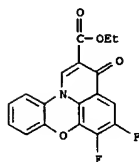


AB The title compds. [I: A, B, D, E = N, CR5; R1-R4 = H, Cl-3 alkyl, (substituted) Ph; R5 = H, alkyl, alkoxy, halo, NO2, alkoxy-carbonyl, (substituted) Ph, PhCH2, etc.; X1 = H, Cl-3 alkyl, halo, NO2; X2 = H, Cl-3 alkyl, (substituted) alkylsulfonyl, PhSO2; X3 = H, Me, halo; Y = cyano, (modified) CO2H; Z = O, NR6; R6 = H, acyl, (un)substituted alkyl, Ph; n, m = 0,1] and their physiol. acceptable salts were prepared as bactericides (no data). Et 2-(2,3-dichloro-5-fluoro-3-nitrobenzyl)-3-ethoxyacrylate (19.0 g) was stirred at room temperature in EtOH with 2-H2NCGH4OH to give (hydroxylanilino)acrylate II. This was heated at 140-145° 3 h in DMF containing K2CO3 to give 12.0 g quinobenzoxazinecarboxylate III.

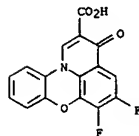
Tablets were prepared each containing III 583.0, microcryst. cellulose 55.0, cornstarch 72.0, polyvinylpyrrolidone 30.0, colloidal silica 5.0, and Mg stearate 5.0 mg with a coating comprising poly[O-(hydroxypropyl)-O-methyl]cellulose 6.0, Macrogol 4000 2.0, polyethylene glycol 2.0, and T102 2.0 mg.

IT 100828-10-2P 100828-11-3P 110943-86-7P 110943-87-8P 110943-88-9P 110943-90-3P 110943-91-4P 110943-97-0P 110943-98-1P 110943-99-2P 110944-01-9P 110944-02-0P  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (preparation of, as bactericide)  
 RN 100828-10-2 CAPLUS  
 CN 3H-Pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid, 5,6-difluoro-3-oxo-, ethyl ester (9CI) (CA INDEX NAME)

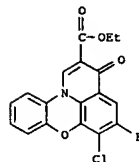
L4 ANSWER 34 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



RN 100828-11-3 CAPLUS  
 CN 3H-Pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid, 5,6-difluoro-3-oxo-, ethyl ester (9CI) (CA INDEX NAME)

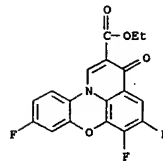


RN 110943-86-7 CAPLUS  
 CN 3H-Pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid, 6-chloro-5-fluoro-3-oxo-, ethyl ester (9CI) (CA INDEX NAME)

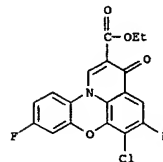


RN 110943-87-8 CAPLUS  
 CN 3H-Pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid, 5,6,9-trifluoro-3-oxo-, ethyl ester (9CI) (CA INDEX NAME)

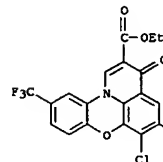
L4 ANSWER 34 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



RN 110943-88-9 CAPLUS  
 CN 3H-Pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid, 6-chloro-5,9-difluoro-3-oxo-, ethyl ester (9CI) (CA INDEX NAME)



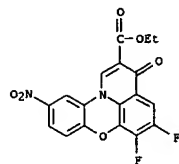
RN 110943-90-3 CAPLUS  
 CN 3H-Pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid, 6-chloro-5-fluoro-3-oxo-10-(trifluoromethyl)-, ethyl ester (9CI) (CA INDEX NAME)



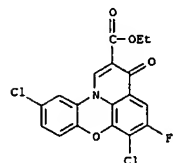
RN 110943-91-4 CAPLUS  
 CN 3H-Pyrido[3,2,1-kl]phenoxazine-2-carboxylic acid, 5,6-difluoro-10-nitro-3-oxo-, ethyl ester (9CI) (CA INDEX NAME)



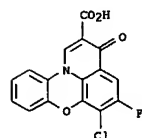
L4 ANSWER 34 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



RN 110943-97-0 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6,10-dichloro-5-fluoro-3-oxo-, ethyl ester (9CI) (CA INDEX NAME)



RN 110943-98-1 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-chloro-5-fluoro-3-oxo- (9CI) (CA INDEX NAME)

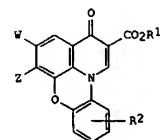


RN 110943-99-2 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 5,6,9-trifluoro-3-oxo- (9CI) (CA INDEX NAME)

L4 ANSWER 35 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 1986:109664 CAPLUS  
 DOCUMENT NUMBER: 104:109664  
 TITLE: Quinobenoxazine antibacterial compounds  
 INVENTOR(S): Chu, Daniel Tim Wo  
 PATENT ASSIGNEE(S): Abbott Laboratories, USA  
 SOURCE: Eur. Pat. Appl., 39 pp.  
 CODEN: EPXKDW  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 3  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 160284	A1	19851106	EP 1985-105112	19850426
EP 160284	B1	19901024		
R: BE, CH, DE, FR, GB, IT, LI, NL, SE				
US 4540694	A	19850910	US 1984-604198	19840426
US 4542133	A	19850917	US 1984-604191	19840426
US 4607032	A	19860819	US 1984-604347	19840426
PRIORITY APPLN. INFO.:			US 1984-604191	A 19840426
			US 1984-604198	A 19840426
			US 1984-604347	A 19840426

OTHER SOURCE(S): CASREACT 104:109664; MARPAT 104:109664  
 G1

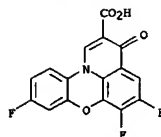


AB Antibacterial (no data) 3H-pyrido[3,2,1-k]phenoxazine-2-carboxylates I [R1 = H, protective group; R2 = 1 or more H, halo, NO2, amino, cyano, CO2H, OCH2O, R3Y, (un)substituted alkyl; R3 = H, alkyl; W = H, halo; Y = O, S; Z = amino, (un)substituted 4-pyridinyl, saturated heterocyclyl; WZ = OCH2O] were prepared. Thus, 2,3,4,5-tetrafluoro-2H-pyrido[3,2,1-k]phenoxazine-2-carboxylic acid was converted to its acid chloride and condensed successively with EtO2CCH2CO2H and (EtO)3CH to give 2,3,4,5-tetrafluoro-2H-pyrido[3,2,1-k]phenoxazine-2-carboxylic acid. The latter was aminolyzed by treatment with 2-H2NCSH4OH and cyclized by heating with NaH in (MeO)2CH2 to give I [R1 = Et, R2 = H, W = Z = F]. This was saponified and condensed with piperazine to give I (R1 = R2 = H, W = F, Z = 1-piperazinyl).

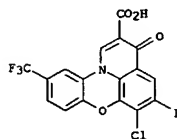
IT 100828-11-3P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation and aminolysis of, by piperazines)

RN 100828-11-3 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 5,6-difluoro-3-oxo- (9CI) (CA INDEX NAME)

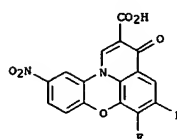
L4 ANSWER 34 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



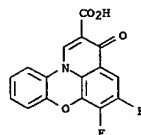
RN 110944-01-9 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-chloro-5-fluoro-3-oxo-10-(trifluoromethyl)- (9CI) (CA INDEX NAME)



RN 110944-02-0 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 5,6-difluoro-10-nitro-3-oxo- (9CI) (CA INDEX NAME)

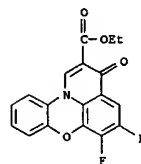


L4 ANSWER 35 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



IT 100828-10-2P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation and saponification of)

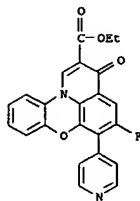
RN 100828-10-2 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 5,6-difluoro-3-oxo-, ethyl ester (9CI) (CA INDEX NAME)



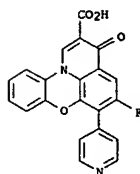
IT 100635-15-2P 100635-16-3P 100828-12-4P  
 100828-13-5P  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (preparation of, as bactericide)

RN 100635-15-2 CAPLUS  
 CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 5-fluoro-3-oxo-6-(4-pyridinyl)-, ethyl ester (9CI) (CA INDEX NAME)

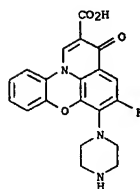
L4 ANSWER 35 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



RN 100635-16-3 CAPLUS  
CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 5-fluoro-3-oxo-6-(4-pyridinyl)- (9CI) (CA INDEX NAME)



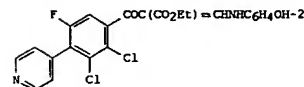
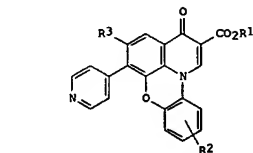
RN 100929-12-4 CAPLUS  
CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 5-fluoro-3-oxo-6-(1-piperazinyl)- (9CI) (CA INDEX NAME)



L4 ANSWER 36 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN  
ACCESSION NUMBER: 1986:109663 CAPLUS  
DOCUMENT NUMBER: 104:109663  
TITLE: Pyrido[3,2,1-k]phenoxazines and antibacterial use  
INVENTOR(S): Chu, Daniel T.  
PATENT ASSIGNEE(S): Abbott Laboratories, USA  
SOURCE: Patent  
U.S., 6 pp.  
CODEN: USXXAM  
DOCUMENT TYPE: English  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 3  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4540694	A	19850910	US 1984-604198	19840426
EP 160284	A1	19851106	EP 1985-105112	19850426
EP 160284	B1	19901024		
R: BE, CH, DE, FR, GB, IT, LI, NL, SE				
JP 60233089	A2	19851119	JP 1985-90781	19850426
JP 06065676	B4	19940824		
CA 1267413	A1	19900403	CA 1985-480215	19850426
PRIORITY APPLN. INFO.:			US 1984-604191	A 19840426
			US 1984-604198	A 19840426
			US 1984-604347	A 19840426

OTHER SOURCE(S): CASREACT 104:109663  
GI



AB The title compds. (I; R1 = H, CO2H-protecting group; R2 = H, halo, alkyl, haloalkyl, hydroxyalkyl, OH, SH, alkoxy, alkylthio, amino; R2 = H, halo) were prepared, and they are useful as bactericides. A benzoylacetate ester was condensed with HC(OEt)3 and 2-H2NCGH4OH to yield methylenated intermediate II; II was heated with NaH in THF to give I (R1 = Et, R2 = H, R3 = F) which was converted to I (R1 = R2 = H, R3 = F).  
IT 100635-15-2P

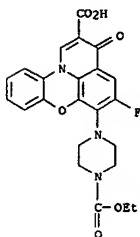
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT

&lt;02/09/2006&gt;

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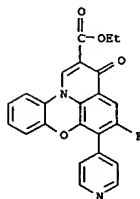
L4 ANSWER 35 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

RN 100929-13-5 CAPLUS  
CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 6-[4-(ethoxycarbonyl)-1-piperazinyl]-5-fluoro-3-oxo- (9CI) (CA INDEX NAME)

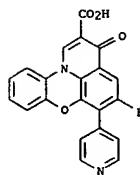


L4 ANSWER 36 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

(Reactant or reagent)  
(prepn. and sapon. of)  
RN 100635-15-2 CAPLUS  
CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 5-fluoro-3-oxo-6-(4-pyridinyl)-, ethyl ester (9CI) (CA INDEX NAME)

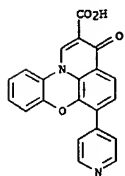


IT 100635-16-3P 100635-17-4P 100635-18-5P  
100635-19-6P  
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(preparation of, as bactericide)  
RN 100635-16-3 CAPLUS  
CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 5-fluoro-3-oxo-6-(4-pyridinyl)- (9CI) (CA INDEX NAME)



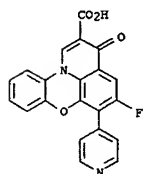
RN 100635-17-4 CAPLUS  
CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, fluoro-3-oxo-6-(3-pyridinyl)- (9CI) (CA INDEX NAME)

L4 ANSWER 36 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



D1-F

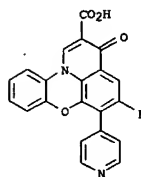
RN 100635-18-5 CAPLUS  
CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 5,7-difluoro-3-oxo-6-(4-pyridinyl)- (9CI) (CA INDEX NAME)



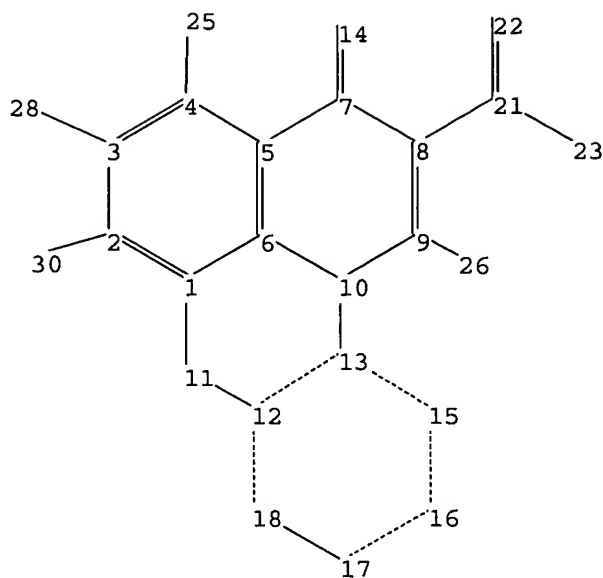
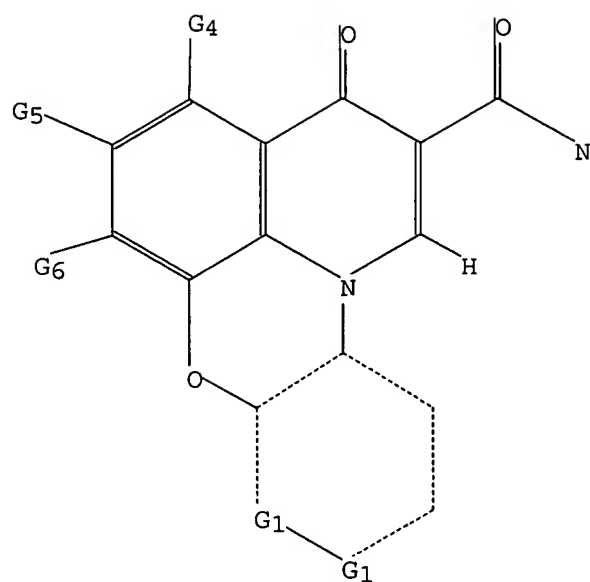
D1-F

RN 100635-19-6 CAPLUS  
CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxylic acid, 5,7,9-trifluoro-3-oxo-6-(4-pyridinyl)- (9CI) (CA INDEX NAME)

L4 ANSWER 36 OF 36 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



2 ( D1-F )



chain nodes :

14 21 22 25 26 28 30

ring nodes :

1 2 3 4 5 6 7 8 9 10 11 12 13 15 16 17 18

ring/chain nodes :

23

chain bonds :

2-30 3-28 4-25 7-14 8-21 9-26 21-22 21-23

ring bonds :

1-2 1-6 1-11 2-3 3-4 4-5 5-6 5-7 6-10 7-8 8-9 9-10 10-13 11-12 12-13  
12-18 13-15 15-16 16-17 17-18

exact/norm bonds :

1-11 2-30 3-28 4-25 5-7 6-10 7-8 7-14 8-9 8-21 9-10 9-26 10-13 11-12  
12-13 12-18 13-15 15-16 16-17 17-18 21-22 21-23

normalized bonds :

1-2 1-6 2-3 3-4 4-5 5-6

G1:C,N

G4:H,X,N,Hy

G5:H,X,NH,N

G6:O,S,X,Hy,N

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom  
11:Atom 12:Atom 13:Atom 14:CLASS 15:Atom 16:Atom 17:Atom 18:Atom 21:CLASS  
22:CLASS 23:CLASS 25:CLASS 26:CLASS 28:CLASS 30:CLASS

L1

STRUCTURE UPLOADED

<02/09/2006>

Habte

=> d l1

L1 HAS NO ANSWERS

L1 STR

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

Structure attributes must be viewed using STN Express query preparation.

=> s l1

SAMPLE SEARCH INITIATED 12:51:37 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 25 TO ITERATE

100.0% PROCESSED 25 ITERATIONS

24 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*

BATCH \*\*COMPLETE\*\*

PROJECTED ITERATIONS: 200 TO 800

PROJECTED ANSWERS: 187 TO 773

L2 24 SEA SSS SAM L1

=> s l1 sss full

FULL SEARCH INITIATED 12:52:15 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 569 TO ITERATE

100.0% PROCESSED 569 ITERATIONS

560 ANSWERS

SEARCH TIME: 00.00.01

L3 560 SEA SSS FUL L1

=> file caplus

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

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167.59

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FILE COVERS 1907 - 9 Feb 2006 VOL 144 ISS 7

FILE LAST UPDATED: 8 Feb 2006 (20060208/ED)

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L4 ANSWER 1 OF 6 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 2005:371379 CAPLUS  
 DOCUMENT NUMBER: 142:424828  
 TITLE: Competition assay for identifying small molecules modulating the formation of quadruplex nucleic acid structures  
 INVENTOR(S): Siddiqui-Jain, Adam; Streiner, Nicole  
 PATENT ASSIGNEE(S): Cylene Pharmaceuticals, Inc., USA  
 SOURCE: PCT Int. Appl., 35 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005037997	A2	20050428	WO 2004-US33401	20041007
WO 2005037997	A3	20050714		

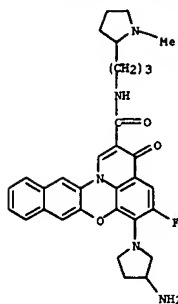
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 RV: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZH, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TH, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 2003-511250P P 20031014  
 AB Methods for identifying mols. that selectively interact with quadruplex motifs in nucleic acids, such as G tetrads, are described. These structures may play a role in the regulation of gene expression and so are potential drug targets. Methods are based on the ability of the compound to modify the structure to allow DNA polymerase readthrough in primer extension assays. DNA polymerases are typically stalled by these motifs. An IC50 for a test compound is a concentration which produces equal nos. of full-length and stalled primer extension products.

IT 850245-43-1  
 RL: ARU (Analytical role, unclassified); CAT (Catalyst use); ANST (Analytical study); USES (Uses)  
 (as effector of DNA quadruplex formation; competition assay for identifying small mols. modulating formation of quadruplex nucleic acid structures)

RN 850245-43-1 CAPLUS  
 CN 3H-Benzo[b]pyrido[3,2,1-kl]phenoxazine-2-carboxamide, 6-(3-amino-1-pyrrolidinyl)-5-fluoro-N-[3-(1-methyl-2-pyrrolidinyl)propyl]-3-oxo- (9CI) (CA INDEX NAME)

L4 ANSWER 1 OF 6 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



own work

L4 ANSWER 2 OF 6 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 2005:349002 CAPLUS  
 DOCUMENT NUMBER: 142:373851  
 TITLE: Preparation of substituted quinobenzoxazine analogs as antitumor agents  
 INVENTOR(S): Whitten, Jeffrey P.; Schwaeb, Michael; Siddiqui-Jain, Adam; Moran, Terence  
 PATENT ASSIGNEE(S): USA  
 SOURCE: U.S. Pat. Appl. Publ., 453 pp., Cont.-in-part of U.S. Ser. No. 821,243.  
 CODEN: USXXCO  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 2  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2005085468	A1	20050421	US 2004-903975	20040730
PRIORITY APPLN. INFO.:			US 2003-461271P	P 20030407
			US 2003-463171P	P 20030415
			US 2003-519535P	P 20031112
			US 2003-532727P	P 20031223
			US 2004-821243	A2 20040407

OTHER SOURCE(S): MARPAT 142:373851  
 GI

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

AB The present invention relates to quinobenzoxazines analogs I [V = H, halo, NR1R2; A = H, F, W(R1)2; Z = O, S, NR1, CH2; U = OR2, NR1R2; X = OR2, NR1R2, halo, azido, SR2; R1 and R2 in NR1R2 may form a double bond or ring; R1 = H, alkyl; R2 = H, alkyl or alkenyl optionally containing one or more non-adjacent heteroatoms selected from N, O, and S, and optionally substituted with a carbocyclic or heterocyclic ring; or R2 = (unsubstituted heterocyclyl, (hetero)aryl; W = (unsubstituted 1,2-benzo, pyrido, naphthaleno, etc.) and pharmaceutically acceptable salts, esters and prodrugs thereof] which are useful for ameliorating a cell disorder such as cancer. Forty-six synthetic examples showed the synthesis of intermediates. E.g., a 4-step synthesis of the fluoroacid II, starting from potassium Et malonate and 2,3,4,5-tetrafluorobenzoyl chloride, was given. Such prepared fluoroacids were reacted with amines to provide compds. I which were then tested in MTS assay and for inhibition of c-myc mRNA. E.g., the compound III showed 50% inhibition of c-myc mRNA levels at 4 µM. The compds. I were tested for antitumor activity in mice (biol. data given for representative compds. I). The compds. I were also claimed as useful for ameliorating a microbial infection.

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L4 ANSWER 2 OF 6 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

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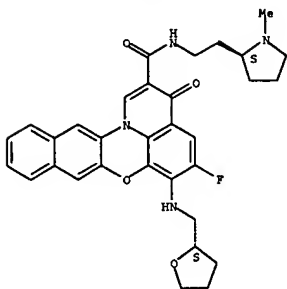
RL: PAC (Pharmacological activity); SFN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of substituted quinobenzoxazine analogs as antitumor agents)

RN 783358-07-6 CAPLUS

CN 3H-Benzo[b]pyrido[3,2,1-k]phenoxazine-2-carboxamide, 5-fluoro-N-[2-[(2S)-1-methyl-2-pyrrolidinyl]ethyl]-3-oxo-6-[[[(2S)-tetrahydro-2-furanyl]methyl]amino]- (9CI) (CA INDEX NAME)

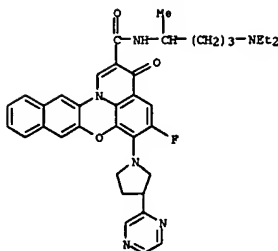
Absolute stereochemistry.



RN 783358-08-7 CAPLUS

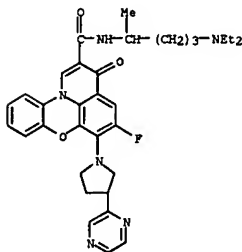
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L4 ANSWER 2 OF 6 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



RN 783358-09-8 CAPLUS

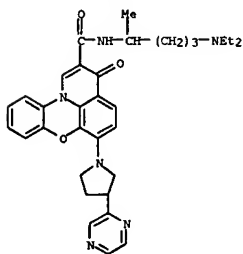
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RN 783358-10-1 CAPLUS

CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxamide, N-[4-(diethylamino)-1-methylbutyl]-3-oxo-6-(3-pyrazinyl-1-pyrrolidinyl)- (9CI) (CA INDEX NAME)

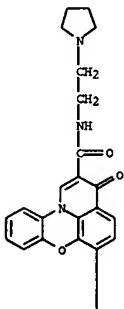
L4 ANSWER 2 OF 6 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



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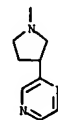
CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxamide, 3-oxo-6-(3-pyrazinyl-1-pyrrolidinyl)-N-[2-(1-pyrrolidinyl)ethyl]- (9CI) (CA INDEX NAME)

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L4 ANSWER 2 OF 6 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

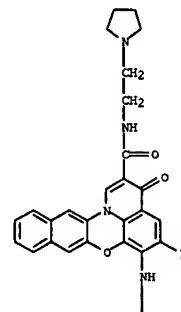
PAGE 2-A



RN 783358-12-3 CAPLUS

CN 3H-Benzo[b]pyrido[3,2,1-k]phenoxazine-2-carboxamide, 5-fluoro-3-oxo-N-[2-(1-pyrrolidinyl)ethyl]-6-[[[(tetrahydro-2-furanyl)methyl]amino]- (9CI) (CA INDEX NAME)

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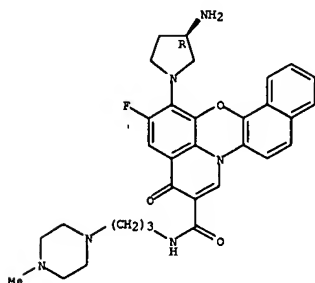
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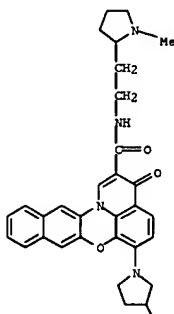
CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxamide, 5-fluoro-3-oxo-6-(3-pyrazinyl-1-pyrrolidinyl)-N-[2-(1-pyrrolidinyl)ethyl]- (9CI) (CA INDEX NAME)

L4 ANSWER 2 OF 6 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



RN 783370-92-3 CAPLUS  
 CN 3H-Benzo[b]pyrido[3,2,1-kl]phenoxazine-2-carboxamide, 6-(3-amino-1-pyrrolidinyl)-N-[2-(1-methyl-2-pyrrolidinyl)ethyl]-3-oxo- (9CI) (CA INDEX NAME)

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L4 ANSWER 3 OF 6 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2004:902098 CAPLUS  
 DOCUMENT NUMBER: 141:395565  
 TITLE: Preparation of substituted quinobenzoxazine analogs as antitumor agents  
 INVENTOR(S): Whitten, Jeffrey P.; Schwaabe, Michael; Siddiqui-Jain, Adam; Moran, Terrance  
 PATENT ASSIGNEE(S): Cyclene Pharmaceuticals, Inc., USA  
 SOURCE: PCT Int. Appl., 438 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 2  
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PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004091504	A2	20041028	WO 2004-US11108	20040407
WO 2004091504	A3	20041028		
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OTHER SOURCE(S): MARPAT 141:395565  
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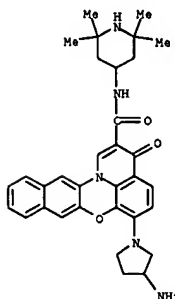
\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

AB The present invention relates to quinobenzoxazines analogs I [V = H, halo, NR1R2; A = H, F, N(R1)2; Z = O, S, NR1, CH2; U = OR2, NR1R2; X = OR2, NR1R2, halo, azido, SR2; R1 and R2 in NR1R2 may form a double bond or ring; R1 = H, alkyl; R2 = H, alkyl or alkenyl optionally containing one or more non-adjacent heteroatoms selected from N, O, and S, and optionally substituted with a carbocyclic or heterocyclic ring; or R2 = (un)substituted heterocyclyl, (hetero)aryl; W = (un)substituted 1,2-benzo, pyrido, naphthaleno, etc. and pharmaceutically acceptable salts, esters and prodrugs thereof] which are useful for ameliorating a cell disorder such as cancer. Forty-six synthetic examples showed the synthesis of intermediates. E.g., a 4-step synthesis of the fluoroacid 11, starting from potassium Et malonate and 2,3,4,5-tetrafluorobenzoyl chloride, was

L4 ANSWER 2 OF 6 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

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RN 783370-94-5 CAPLUS  
 CN 3H-Benzo[b]pyrido[3,2,1-kl]phenoxazine-2-carboxamide, 6-(3-amino-1-pyrrolidinyl)-3-oxo-N-(2,2,6,6-tetramethyl-4-piperidinyl)- (9CI) (CA INDEX NAME)



L4 ANSWER 3 OF 6 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

given. Such prep. fluoroacids were reacted with amines to provide compds. I which were then tested in MTS assay and for inhibition of c-myc mRNA. E.g., the compd. III showed 50% inhibition of c-myc mRNA levels at 4 μM. The compds. I were tested for antitumor activity in mice (biol. data given for representative compds. I). The compds. I were also claimed as useful for ameliorating a microbial infection.

IT

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&lt;02/09/2006&gt;

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L4 ANSWER 3 OF 6 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

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RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

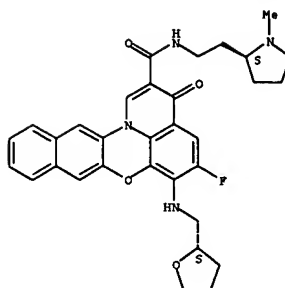
(prepn. of substituted quinobenzoxazine analogs as antitumor agents)

RN 783358-07-6 CAPLUS

CN 3H-Benzo[b]pyrido[3,2,1-k]phenoxazine-2-carboxamide, 5-fluoro-N-[2-[(2S)-1-methyl-2-pyrrolidinyl]ethyl]-3-oxo-6-[[[(2S)-tetrahydro-2-furanyl]methylamino]- (9CI) (CA INDEX NAME)

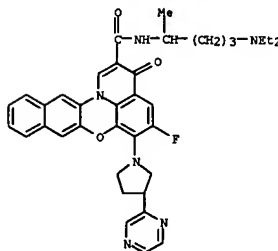
Absolute stereochemistry.

L4 ANSWER 3 OF 6 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



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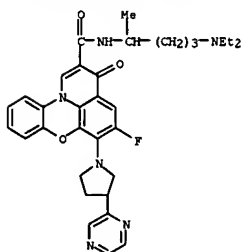
CN 3H-Benzo[b]pyrido[3,2,1-k]phenoxazine-2-carboxamide, N-[4-(diethylamino)-1-methylbutyl]-5-fluoro-3-oxo-6-[(3-pyrazinyl-1-pyrrolidinyl)- (9CI) (CA INDEX NAME)



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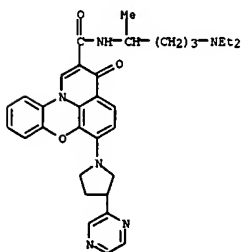
CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxamide, N-[4-(diethylamino)-1-methylbutyl]-5-fluoro-3-oxo-6-[(3-pyrazinyl-1-pyrrolidinyl)- (9CI) (CA INDEX NAME)

L4 ANSWER 3 OF 6 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



RN 783358-10-1 CAPLUS

CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxamide, N-[4-(diethylamino)-1-methylbutyl]-5-fluoro-3-oxo-6-[(3-pyrazinyl-1-pyrrolidinyl)- (9CI) (CA INDEX NAME)

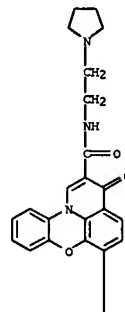


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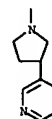
CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxamide, 3-oxo-6-[(3-pyrazinyl-1-pyrrolidinyl)-N-[2-(1-pyrrolidinyl)ethyl]- (9CI) (CA INDEX NAME)

L4 ANSWER 3 OF 6 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

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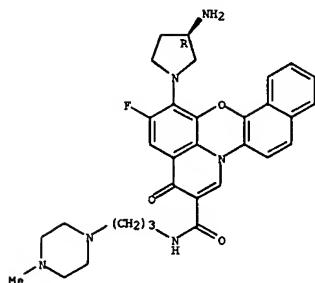
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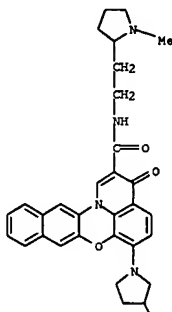
CN 3H-Benzo[b]pyrido[3,2,1-k]phenoxazine-2-carboxamide, 5-fluoro-3-oxo-N-[2-(1-pyrrolidinyl)ethyl]-6-[[[(tetrahydro-2-furanyl)methylamino]- (9CI) (CA INDEX NAME)

L4 ANSWER 3 OF 6 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



RN 783370-92-3 CAPLUS  
CN 3H-Benzo[b]pyrido[3,2,1-kl]phenoxazine-2-carboxamide, 6-(3-amino-1-pyrrolidinyl)-N-[2-(1-methyl-2-pyrrolidinyl)ethyl]-3-oxo- (9CI) (CA INDEX NAME)

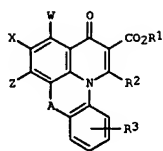
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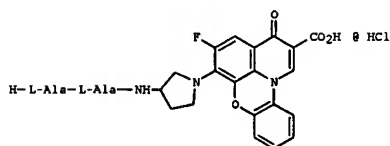
L4 ANSWER 4 OF 6 CAPLUS COPYRIGHT 2006 ACS on STN  
ACCESSION NUMBER: 1995:394717 CAPLUS  
DOCUMENT NUMBER: 122:160653  
TITLE: Quinolinobenzoxazine, antineoplastic agents  
INVENTOR(S): Chu, Daniel T.; Plattner, Jacob J.; Hallas, Robert  
PATENT ASSIGNEE(S): Abbott Laboratories, USA  
SOURCE: U.S., 31 pp. Cont. of U.S. Ser. No. 573,102, abandoned  
CODEN: USXXAM  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 3  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 531865	A	19940607	US 1992-842910	19920227
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PRIORITY AFFIL. INFO.:  
OTHER SOURCE(S): MARPAT 122:160653  
GI



I



II

AB Quinolinobenzoxazine derivs. of the formula I as well as the

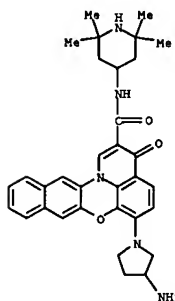
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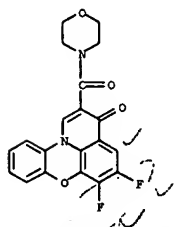
L4 ANSWER 3 OF 6 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

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RN 783370-94-5 CAPLUS  
CN 3H-Benzo[b]pyrido[3,2,1-kl]phenoxazine-2-carboxamide, 6-(3-amino-1-pyrrolidinyl)-3-oxo-N-(2,2,6,6-tetramethyl-4-piperidinyl)- (9CI) (CA INDEX NAME)

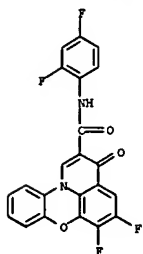


L4 ANSWER 4 OF 6 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)  
pharmaceutically acceptable salts, esters, amides and prodrugs thereof are disclosed, wherein R1 is hydrogen or a carboxy-protecting group, R2 and R3 are substituents, A is oxygen, Z is a halogen or a nitrogen-contg. group, X in hydrogen, halogen or alkyl, and W is hydrogen, alkyl, amino or halogen. Antineoplastic activity of title compd. II (prepn. given) against solid tumors implanted in mice was measured as mean lifespan comparison Value, or mean survival time (test/control) (MST(T/C)): 215% at 12.5 mg/kg. Pharmaceutical compns. are given.  
IT 142136-99-0P, 1,2-Difluoro-5-(1-morpholinocarbonyl)-4-oxo-4H-quinolino[2,3,4-i,j][1,4]benzoxazine 142137-00-6P, 1,2-Difluoro-4-oxo-4H-quinolino[2,3,4-i,j][1,4]benzoxazine-5-(N-2,4-difluorophenyl)carboxamide  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
RN 142136-99-0 CAPLUS  
CN Morpholine, 4-[(5,6-difluoro-3-oxo-3H-pyrido[3,2,1-kl]phenoxazin-2-yl)carbonyl]- (9CI) (CA INDEX NAME)



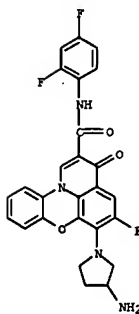
RN 142137-00-6 CAPLUS  
CN 3H-Pyrido[3,2,1-kl]phenoxazine-2-carboxamide, N-(2,4-difluorophenyl)-5,6-difluoro-3-oxo- (9CI) (CA INDEX NAME)

L4 ANSWER 4 OF 6 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



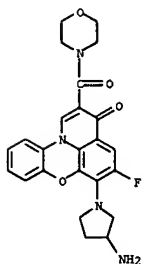
IT 142136-43-4P, 1-(3-Aminopyrrolidin-1-yl)-2-fluoro-4-oxo-4H-quinolino[2,3,4-i,j][1,4]benzoxazine-5-(N-2,4-difluorophenyl)carboxamide  
142247-58-3P, 1-(3-Aminopyrrolidin-1-yl)-2-fluoro-5-(1-morpholinocarbonyl)-4-oxo-4H-quinolino[2,3,4-i,j][1,4]benzoxazine trifluoroacetate salt 142247-61-8P, 1-(3-Aminopyrrolidin-1-yl)-2-fluoro-4-oxo-4H-quinolino[2,3,4-i,j][1,4]benzoxazine-5-(N-2,4-difluorophenyl)carboxamide hydrochloride  
RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(preparation as antineoplastic agent)  
RN 142136-43-4 CAPLUS  
CN 3H-Pyrido[3,2,1-kl]phenoxazine-2-carboxamide, 6-(3-amino-1-pyrrolidinyl)-N-(2,4-difluorophenyl)-5-fluoro-3-oxo- (9CI) (CA INDEX NAME)

L4 ANSWER 4 OF 6 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



RN 142247-58-3 CAPLUS  
CN Morpholine, 4-[[6-(3-amino-1-pyrrolidinyl)-5-fluoro-3-oxo-3H-pyrido[3,2,1-kl]phenoxazin-2-yl]carbonyl]-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)  
CH 1  
CRN 142136-42-3  
CMF C24 H23 F N4 O4

L4 ANSWER 4 OF 6 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

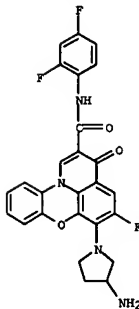


CH 2  
CRN 76-05-1  
CMF C2 H F3 O2



RN 142247-61-8 CAPLUS  
CN 3H-Pyrido[3,2,1-kl]phenoxazine-2-carboxamide, 6-(3-amino-1-pyrrolidinyl)-N-(2,4-difluorophenyl)-5-fluoro-3-oxo-, monohydrochloride (9CI) (CA INDEX NAME)

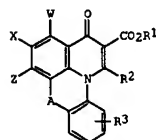
L4 ANSWER 4 OF 6 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



● HCl

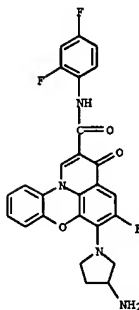
L4 ANSWER 5 OF 6 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 1994:298636 CAPLUS  
 DOCUMENT NUMBER: 120:298636  
 TITLE: Quinobenzoxazine, quinobenzothiazine and pyridoacridine antineoplastic agents  
 INVENTOR(S): Chu, Daniel T.; Plattner, Jacob J.; Hallas, Robert  
 PATENT ASSIGNEE(S): Abbott Laboratories, USA  
 SOURCE: PCT Int. Appl., 83 pp.  
 CODEN: PIXX2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 3  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9316702	A1	19930902	WO 1993-US1766	19930226
W: AU, CA, JP, KR				
US 5318965	A	19940607	US 1992-842910	19920227
AU 9337803	A1	19930913	AU 1993-37803	19930226
JP 07500611	T2	19950119	JP 1993-515097	19930226
JP 2578576	B2	19970205		
PRIORITY APPLN. INFO.:			US 1992-842910	A 19920227
			US 1990-573102	B2 19900824
			WO 1993-US1766	A 19930226
OTHER SOURCE(S):		MARPAT 120:298636		
GI				



AB The title compds. [1: A = O, CH2, S; R1 = H, carboxy-protecting group; R2 = H, C1-6 alkyl, C1-6 alkoxy, C1-6 sulfhydroalkyl; R3 = H, halogen, NO2, C1-6 alkyl, CO2H, methylenedioxy, CN, halo-substituted C1-6 alkyl, hydroxy-substituted C1-6 alkyl, (un)substituted amino, etc.; W = H, C1-6 alkyl, (un)substituted amino, halogen, alkoxy, HO, etc.; X = H, halogen, C1-6 alkyl, halo-substituted C1-6 alkyl; Z = halogen, (un)substituted N-containing heterocycle, etc.], useful for the treatment of leukemia, melanoma, lung, colon, and ovarian carcinomas, are prepared Thus, 1-(3-aminopyrrolidin-1-yl)-2-fluoro-4-oxo-4H-quinol[2,3,4-i,j][1,4]benzoxazine-5-carboxylic acid hydrochloride was converted into 1-(3-alanylalanylaminopyrrolidin-1-yl)-2-fluoro-4-oxo-4H-quinol[2,3,4-

L4 ANSWER 5 OF 6 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)  
 i,j][1,4]benzoxazine-5-carboxylic acid hydrochloride (II) in 4 steps. II demonstrated 197% mean lifespan comparison value when administered at 20 mg/kg to colon adenocarcinoma-implanted mice, vs. 100% for similarly implanted mice receiving no treatment.  
 IT 142136-43-6P 142247-58-3P 142247-61-8P  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (preparation and antineoplastic activity of)  
 RN 142136-43-4 CAPLUS  
 CN 3H-Pyrido[3,2,1-kl]phenoxazine-2-carboxamide, 6-(3-amino-1-pyrrolidinyl)-N-(2,4-difluorophenyl)-5-fluoro-3-oxo- (9CI) (CA INDEX NAME)

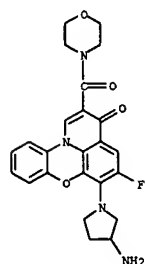


RN 142247-58-3 CAPLUS  
 CN Morpholine, 4-[[6-(3-amino-1-pyrrolidinyl)-5-fluoro-3-oxo-3H-pyrido[3,2,1-kl]phenoxazin-2-yl]carbonyl]-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CH 1

CRN 142136-42-3  
 CMF C24 H23 F N4 O4

L4 ANSWER 5 OF 6 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



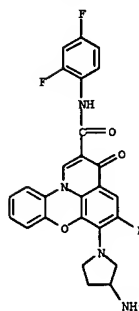
CH 2

CRN 76-05-1  
 CMF C2 H F3 O2



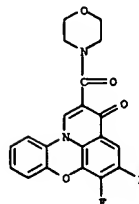
RN 142247-61-8 CAPLUS  
 CN 3H-Pyrido[3,2,1-kl]phenoxazine-2-carboxamide, 6-(3-amino-1-pyrrolidinyl)-N-(2,4-difluorophenyl)-5-fluoro-3-oxo-, monohydrochloride (9CI) (CA INDEX NAME)

L4 ANSWER 5 OF 6 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



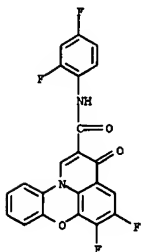
● HCl

IT 142136-99-0P 142137-00-6P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation and reaction of, in preparation of antineoplastic agents)  
 RN 142136-99-0 CAPLUS  
 CN Morpholine, 4-[[6-(3-amino-1-pyrrolidinyl)-5-fluoro-3-oxo-3H-pyrido[3,2,1-kl]phenoxazin-2-yl]carbonyl]- (9CI) (CA INDEX NAME)



RN 142137-00-6 CAPLUS  
 CN 3H-Pyrido[3,2,1-kl]phenoxazine-2-carboxamide, N-(2,4-difluorophenyl)-5,6-difluoro-3-oxo- (9CI) (CA INDEX NAME)

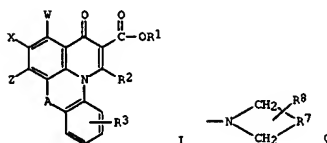
L4 ANSWER 5 OF 6 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



L4 ANSWER 6 OF 6 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1992:511620 CAPLUS  
DOCUMENT NUMBER: 117:111620TITLE: Preparation of 1-(aminopyrrolidin-1-yl)-2-fluoro-4-oxo-4H-quinol[2,3,4-i,j][1,4]benzoxazine-5-carboxylic acids and related compounds as antineoplastic agents  
INVENTOR(S): Chu, Daniel T.; Plattner, Jacob J.; Hallas, Robert  
PATENT ASSIGNEE(S): Abbott Laboratories, USA  
SOURCE: PCT Int. Appl., 76 pp.  
CODEN: PIXXD2  
PatentDOCUMENT TYPE: English  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 3  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9203136	A1	19920305	WO 1991-US6040	19910823
W: CA, JP, US				
RW: AT, BE, CH, DE, ES, FR, GB, GR, IT, LU, NL, SE				
CA 2099609	AA	19920225	CA 1991-2099609	19910823
EP 608215	A1	19940803	EP 1991-918185	19910823
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE				
PRIORITY APPL. INFO.:			US 1990-573102	A 19900824
			WO 1991-US6040	W 19910823
OTHER SOURCE(S):		MARPAT 117:111620		
GI				

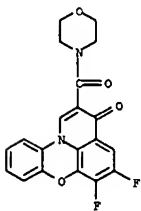


AB The title compds. [I: A = O, CH<sub>2</sub>, S; R<sub>1</sub> = H, carboxy-protecting group; R<sub>2</sub> = H, Cl-6 alkyl, Cl-6 alkory, Cl-6 sulphydroalkyl; R<sub>3</sub> = H, halo, NO<sub>2</sub>, Cl-6 (halo)alkyl, carboxyl, OCH<sub>2</sub>O, cyano, YR<sub>4</sub>, NR<sub>5</sub>R<sub>6</sub>, etc.; Y = O, S; R<sub>4</sub>-R<sub>6</sub> = H, Cl-6 alkyl; W = H, HO, Cl-6 alkyl, amino, halo, etc.; X = H, halo, Cl-6 (halo)alkyl; Z = halo, N-containing heterocyclyl Q; R<sub>7</sub> = (CH<sub>2</sub>)<sub>n</sub>, CH<sub>2</sub>CH<sub>2</sub>NCH<sub>2</sub>CH<sub>2</sub>, etc.; n = 1-3; R<sub>8</sub> = 1 or 2 groups selected from H, Cl-6 (halo)alkyl, Cl-6 aminosalkyl; etc.] or their pharmaceutically acceptable salts, esters, or amides, were prepared. The coupling of 1-(3-aminopyrrolidin-1-yl)-2-fluoro-4-oxo-4H-quinol[2,3,4-i,j][1,4]benzoxazine-5-carboxylic acid hydrochloride [J. Heterocyclic Chemical 24, 453-6 (1987)] with tert-butylloxycarbonyl-L-norvaline-N-hydroxyphthalimide in DMF containing N-methylmorpholine gave 56%

L4 ANSWER 6 OF 6 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)  
1-(tert-butylloxycarbonyl-L-norvalylaminopyrrolidin-1-yl) deriv. which was treated by HCl in AcOH to give 96% title compd. 1-(3-norvalylaminopyrrolidin-1-yl)-2-fluoro-4-oxo-4H-quinol[2,3,4-i,j][1,4]benzoxazine-5-carboxylic acid hydrochloride (II). The latter in vitro inhibited growth of, e.g., A549, HT-29, and P388-ADR tumor cells with IC<sub>50</sub> of 0.591, 0.195, and 0.394, resp., vs. 0.313, 0.285, and 2.59 for adriamycin. II at 3.9 mg/kg i.p. in mice with ascitic leukemia tumor P388 gave a percent ratio T/C = 177.3 [mean or median survival times of test (T) and control (C) mice], vs. T/C = 160 for adriamycin at 6.25 mg/kg i.p.

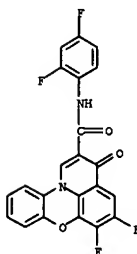
IT 142136-99-0P 142137-00-6P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and reaction of, in preparation of antineoplastic agents)  
RN 142136-99-0 CAPLUS  
CN Morpholine, 4-[(5,6-difluoro-3-oxo-3H-pyrido[3,2,1-k]phenoxazin-2-yl)carbonyl]- (9CI) (CA INDEX NAME)



RN 142137-00-6 CAPLUS  
CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxamide, N-(2,4-difluorophenyl)-5,6-difluoro-3-oxo- (9CI) (CA INDEX NAME)

L4 ANSWER 6 OF 6 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

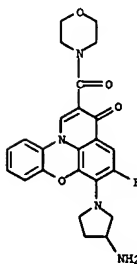


IT 142136-42-3P 142136-43-4P 142247-58-3P  
142247-61-8P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of, as antineoplastic agent)

RN 142136-42-3 CAPLUS

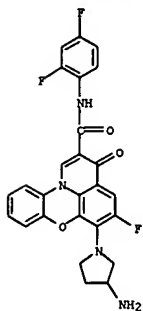
CN Morpholine, 4-[(6-(3-amino-1-pyrrolidinyl)-5-fluoro-3-oxo-3H-pyrido[3,2,1-k]phenoxazin-2-yl)carbonyl]- (9CI) (CA INDEX NAME)



RN 142136-43-4 CAPLUS

CN 3H-Pyrido[3,2,1-k]phenoxazine-2-carboxamide, 6-(3-amino-1-pyrrolidinyl)-N-(2,4-difluorophenyl)-5-fluoro-3-oxo- (9CI) (CA INDEX NAME)

L4 ANSWER 6 OF 6 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

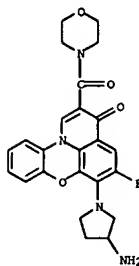


RN 142247-58-3 CAPLUS  
 CN Morpholine, 4-[[6-(3-amino-1-pyrrolidinyl)-5-fluoro-3-oxo-3H-pyrido[3,2,1-kl]phenoxazin-2-yl]carbonyl]-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CH 1

CRN 142136-42-3  
 CMF C24 H23 F N4 O4

L4 ANSWER 6 OF 6 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



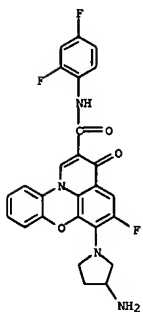
CH 2

CRN 76-05-1  
 CMF C2 H F3 O2



RN 142247-61-8 CAPLUS  
 CN 3H-Pyrido[3,2,1-kl]phenoxazine-2-carboxamide, 6-(3-amino-1-pyrrolidinyl)-N-(2,4-difluorophenyl)-5-fluoro-3-oxo-, monohydrochloride (9CI) (CA INDEX NAME)

L4 ANSWER 6 OF 6 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



● HCl